

DEC 10 1923

Read Complete Accounts of National H. & V. Ass'n and
Western Warm Air Furnace Meetings in This Issue.

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AMERICAN ARTISAN and Hardware Record

Vol. 86. No. 23. 620 SOUTH MICHIGAN AVENUE, CHICAGO, DECEMBER 8, 1923. \$2.00 Per Year.

Plant now for a bigger crop of business in Nineteen-twenty Four ●

- 1—Specific data and information regarding the trade (from all angles) from manufacturers and dealers throughout the country.
- 2—Special articles by accepted authorities.
- 3—Detailed information regarding the latest experiments in warm air heating.
- 4—Business outlook for 1924 from manufacturers' standpoint.
- 5—Articles telling what the installer thinks about business for next year.
- 6—Opinions of experts on the improvements made by the industry covering both manufacturing and installation.
- 7—The price and building situations outlined.
- 8—Editorial comment on the manufacturing, selling and installing of warm air furnaces.
- 9—Examples of proper installations of warm air furnaces.
- 10—Reproduction of dealers' helps, how dealers use them etc.

GET your agency seeds into fertile business soil with the dawn of the new year.

Put *your* message into type and picture in our WARM AIR FURNACE SPECIAL to be issued on December 29th.

As we go to press with this week's issue we pass last year's mark in advertising space reserved and you should see the abundance of live, interesting and helpful editorial matter that is waiting for the presses.

There is still time but not much—for you to catch this issue.

Send your order, copy and cuts today.

If you desire—just send us the cuts you wish used and your advertising matter and we will submit copy for your O. K.

The important part is to take care of it now TODAY as time is short.

AMERICAN ARTISAN AND HARDWARE RECORD
620 South Michigan Avenue Chicago, Illinois

THE SUPER-SMOKELESS FURNACE

Burns Soft Coal Smokelessly!

Erected in a Very Short Time. Made in All Sizes of the SUPERIOR Pipe and NEW IDEA Pipeless Furnaces.

SUPER-SMOKELESS Furnaces have become tremendously popular in the soft coal sections. They are remarkably clean in operation and cut down coal consumption. All castings are deeply cupjointed and accurately ground to fit. The casings "slip-on" and have no loose nuts to bother with and very few bolts.

Meet the need for smokeless heaters and sell the most highly improved and profitable quality furnace made. Write for dealer proposition.

UTICA HEATER COMPANY

UTICA, New York

218-220 West Kinzie Street, Chicago, Illinois





WISE

**Pipe and Pipeless
FURNACES**

BEING a Wise dealer is easy, pleasant, profitable and permanent.

Our service makes it easy and pleasant—the high quality and reasonable price of Wise Furnaces make it profitable and permanent.

Let us send you further
Wise information
now.

*Write for
the Wise
Catalog
today*

The Wise Furnace Co.
AKRON, OHIO

Thoroughly Covers
the Hardware, Stove,
Sheet Metal, and
Warm Air Heating and
Ventilating Interests

Founded 1880 by Daniel Stern

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CHICAGO, DECEMBER 8, 1923.

\$2.00 Per Year.

GOOD WILL CAN BE EARNED ONLY BY RENDERING REAL SERVICE.

"Shakespeare appraised good-will at its true value when he said:

'He who steals my purse steals trash;

'tis something, nothing;

'Twas mine, 'tis his, and has

been slave to thousands;

But he who filches from me my good
reputation

Robs me of that which not enriches him

And leaves me poor indeed.'

"Good-will is born of confidence.

"Confidence is the inevitable result of ability to serve—proved over long periods of time.

"In short, good-will is the child of Service.

"The more whole-souled, the more energetic, the more enthusiastic the service, the greater the profits."

The foregoing paragraphs are quoted from a recent advertisement of one of the greatest manufacturing and merchandising organizations in the world.

And note, please, the closing paragraph:

"The more whole-souled, the more energetic, the more enthusiastic the service, the greater the profit."

Those people are not afraid of advertising that it is a profitable proposition for them to render good service. They even broadcast their experience, that the better their service the more profit they make.

But what is "Service"?

Quoting again from the advertisement:

"Service is interpreted by us to mean some-

thing more than the perfunctory delivery of our products.

"It means the highest standard of quality in manufacture and the maintenance of that standard at all times."

Translating this into warm air furnace language, "Service" means:

Something more than the perfunctory installing of a furnace.

It means—

The selling of a warm air heating plant that will really heat the building at reasonable expenditure of fuel and with as little actual attention as possible.

It means—

The selling of a "Performance" rather than a furnace.

It means, after the selling, an installation that will insure the satisfaction and comfort that the prospective customer has been led to believe you will give him.

It means, after the installation, sufficient attention by the installer to make certain that the apparatus as a whole operates as you promised it would.

That is the sort of "Service" that has built up "Good-will" for hundreds of installers, who rarely if ever have to figure against competitors. Their customers ask for an estimate only to ascertain what the job will cost.

The work started at the Urbana and Chicago meetings indicates in what light the warm air heating men regard their business.

Random Notes and Sketches.

By Sidney Arnold

Recently, while in St. Louis, I visited with George F. Fiske, Treasurer of the American Stove Company. We exchanged a couple of funny stories, one of which began this way:

Bill—"I hear that Mrs. Newlywed worships her husband."

Jim—"Yes, she places burnt offerings before him three times a day."

Mr. Fiske was not to be caught, and quick as a flash came this shot:

"Where does she live? We must sell her a Quick Meal Lorain-equipped gas range."

* * *

"Some people in the furnace business don't know any more about it than the clerk in the London music store," said Charlie Hahn, the "Hoot Man" of Northwest Chicago, and then he told what happened:

"I want an E string, please," said the violinist.

"I'm a new 'and at this business, sir," explained the clerk as he took down the box, 'would you mind picking-it out for yourself? I 'ardly knows the 'es from the shes.'"

* * *

Arthur Lamneck, than whom there are few more eloquent orators within the realm of warm air furnaces and sheet metals, was in Chicago the other day and during our dinner at the Sherman Grill remarked about the possibility of some people getting too much education, illustrating it with the following story:

The Swedish maid was sobbing as if her heart would break, and the mistress, coming upon her in tears, asked what was the matter.

"My husband bane get put in yail," wailed Hilda.

"In jail? Oh, isn't that too bad! But there's a cheerful side to everything. I understand they give prisoners splendid educations there nowadays."

"He bane got all the eddication he needs," asserted Hilda through her tears. "He bane there ten years before."

* * *

The many friends of "the only" George Carr will be glad to learn that he is once more in as good shape as a man of his shape can be.

George has had a hard time of it this past summer catching up with his breath, but he can draw a long one now and says he is feeling fine.

But he has lost quite a bit of adipose tissue—he may not know what this means—and it has left him with a very handy ledge located at about his sixth rib, where he can now rest his telephone while trying to get an "extra five" off on his registers or sell a carload of Interstate furnaces.

* * *

Ralph Blanchard is guilty of this outrage:

"And whom does the statue represent?" asked Mrs. Green, who was "doing" the museum under the guidance of her more sophisticated friend, Mrs. Brown.

"That is Psyche," replied Mrs. Brown, "executed, I believe, in terra cotta."

"Oh, the poor thing!" exclaimed Mrs. Green. "How barbarous they are in those South American countries!"

* * *

I have always held that the idea that "business men should not take an active part in politics, because it may hurt their business," is wrong, and I am glad to see that a progressive and prosperous hardware merchant like Charlie Williams in Streator, Illinois, has interst enough in the politics of his community to send out the following letter, from which names of persons and offices have been deleted for obvious reasons:

TO AMERICAN ARTISAN:

Politics has become such a vital part of business and business is so

necessary in politics that no merchant can refrain from participation in political campaigns without seeing his business suffer as a result of his failure.

Our good friend and neighbor, ———, is a candidate for the Republican nomination for ———. We, his fellow citizens, have known him all his life. We have watched him in school, in the practice of his profession, in his performance of his duty in public life. He is an able leader, of untarnished reputation, a man of unusual ability, of excellent poise.

We have watched him give his best efforts to the service of his people as city attorney, mayor and state senator. He has never failed us and we have no hesitancy in recommending him most highly to you.

We unqualifiedly recommend ——— to you. We ask you and your employes to support his candidacy and to urge your friends to go to the polls April 8th and give him your cordial indorsement.

We hope you will write us, advising us of your personal interest in this movement for clean and honest government.

Very truly,

WILLIAMS HARDWARE COMPANY.

By Charles H. Williams.

* * *

Here is a bit of verse that I noticed the other day. The author is unknown to me, even the name, but whoever he or she is, the sentiment expressed is certainly worth passing on to my friends:

A Good Creed

A little more kindness and a little less creed;

A little more giving and a little less greed;

A little more smile and a little less frown;

A little less kicking a man when he's down;

A little more "we" and a little less "I";

A little more laugh and a little less cry;

A few more flowers on the pathway of life;

And fewer on graves at the end of the strife.

Educational Research Residence Will Be Built by National Warm Air Heating and Ventilating Association.

Special Committee also Appointed to Formulate Plans for Educational Research Bureau with E. F. Glore as Chairman.

THE National Warm Air Heating and Ventilating Association, at its meeting in Urbana, Illinois, on December fourth, took two steps which will in a short time place it foremost in the ranks of coöperative organizations which work not only for the benefit of the members themselves, but for their customers and that of the general public as well.

The great research work which has been carried on under the auspices and with the heavy financial support of the Association is to be carried still further and along lines which are a logical outcome and result of the progressive spirit which rules that organization.

By unanimous vote, it was decided that an Educational Research Residence is to be built in Urbana, Illinois, in which the laboratory work that has been done at the university will be continued and broadened into the field of actual installation of furnaces.

In this Educational Research Residence, which will be built and equipped at a cost of about \$25,000, the formulas which have been worked out in the Research Department of the university will be tested out under typical residential conditions. This residence is to be started at once, weather permitting.

The other important step is the determination to bring the results of the work in the laboratory and in the Educational Research Residence home to the installer and user of warm air furnaces.

This feature is to be worked out in detail and presented to the Association at its annual meeting in Cleveland in April, 1924, a committee having been appointed by President Langenberg to formulate a plan for raising the necessary funds and to outline the various phases of the work to be undertaken.

Evins F. Glore, of Abram Cox Stove Company; D. Rait Richardson, of Richardson & Boynton Company, and G. L. Bridge, of Bridge & Beach Manufacturing Company, compose this special committee, which will work in conjunction with Dr. Wagner's committee.

The entire warm air furnace industry, from the largest manufacturer to the smallest installer, and indeed the millions of families who



E. B. Langenberg,
President National Warm
Air Heating & Ventilating Association.

live in residence houses, are to be congratulated upon these important steps, for as a result of them, there is bound to be a decided improvement in the manufacture, in the installation, in the purchase and use of warm air furnaces. More people will buy warm air furnaces; more people will know how to operate them efficiently, more people will know how to install them properly; all of which will mean the return of bread cast upon the waters.

Monday, December 3, was taken up with work of several committees, but early Tuesday forenoon the Convention was called to order in the ball room of the new Urbana Lincoln Hotel—and let it be said

here that mine host, Charles Renner, is to be complimented upon the manner in which the comforts of the hundred and twenty odd members and guests were looked after, in spite of the fact that this new, beautiful hostelry is not yet in complete operation. The rooms are well furnished; the meals excellent and the employees courteous and pleasant in rendering service.

Only a brief session was held here and the delegates and guests adjourned to the research building of the University of Illinois, when Professor A. C. Willard, under whose highly efficient supervision the research work has been carried on, introduced David Kinley, President of the University, who in a unique and pleasant manner extended a welcome to the visitors. President Langenberg responded briefly.

Professor M. S. Ketchum, Dean of the College of Engineering and Director of the Research Department, spoke on the various phases of Research Work and their connection with one another, and cited several cases of large industrial enterprises which are now coöperating with the Department and deriving great benefits.

Professor Willard, together with four of his assistants, then took the visitors on a tour of inspection through the section of the Research Building devoted to the Warm Air Furnace and the many intricate and ingenious testing appliances were explained in detail.

Upon returning to the hotel, all gathered at a luncheon in the Ball room, where 158 covers were laid, and as soon as the coffee had been served the program was resumed, with President Langenberg in the chair.

E. L. Jaynes, President of the Western Warm Air Furnace & Sup-

ply Association, was the first to be called on and he responded with an invitation to all to attend the Annual Meeting of his organization on Wednesday in Chicago.

Dean C. M. Thompson, of the College of Commerce, spoke on "Taxation," calling attention to the fact that the average man wants tax reduction for himself, but also wants to have many things for which both state and federal governments must of necessity ask for more taxes. He urged a greater personal interest in public affairs, and especially in election matters.

I. L. Jones, Chairman of the Joint Committee of the Research Advisory, Executive and Code Committees, held recently in Cleveland, tendered the report which forms the foundation for the new phase of the Research Activities of the Association, as follows:

Whereas, in pursuance of a resolution passed at the Annual Meeting of the National Warm Air Heating and Ventilating Association, held at Cleveland, April 18 and 19, 1923, creating a Joint Committee consisting of the Executive, Research Advisory and Code Committees, to investigate erecting an Educational Research Residence in conjunction with the Research Work now being carried on at the University of Illinois, this Joint Committee now submits the following report:

After careful investigation, such a house is practical, advisable and necessary for the purpose intended, and therefore we present the following resolution:

Whereas, the type and size of house has been determined upon and approved by the Joint Committee, and

Whereas, this house can be erected and equipped, including the cost of real estate, for a cost not in excess of \$25,000; therefore,

Be it Resolved, (1) That the Executive Committee be authorized to proceed with the purchase of the real estate and the erection of such a house at a cost not exceeding \$25,000, and

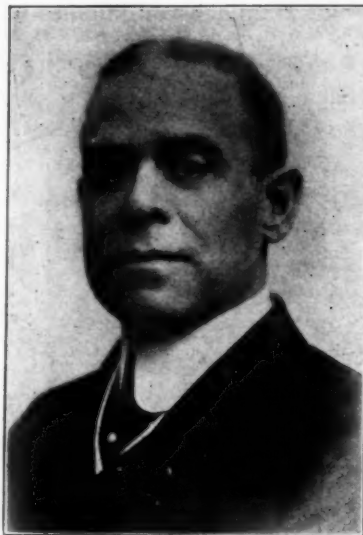
(2) That the necessary funds be

raised through an assessment, based upon the Unit Plan, as provided by our Constitution, Article 6, and that said assessment shall be at the rate of \$10.00 per Unit, payable 50 per cent at once and the balance within six months, or on call of the Executive Committee.

I. L. Jones, Professor A. C. Willard, C. M. Lyman, Professor J. D. Hoffman, E. F. Glore, F. W. Phelps, R. W. Menk, W. H. Hill, Joseph Farris and others spoke to the resolution, all endorsing the plan for its practical value to the industry.

It was passed unanimously.

Mr. Jones then proposed a resolution to cover the matter of title of



Allen W. Williams,
Secretary National Warm Air
Heating & Ventilating
Association.

the Educational Research Residence, ownership being vested in the following three trustees:

Professor A. C. Willard, Urbana, Illinois.

Allen W. Williams, Columbus, Ohio.

Fred W. Phelps, Joliet, Illinois.

Professor J. D. Hoffman, who as Chairman of the Joint Code Committee has had much to do with the progress of this important work of the Association, congratulated the members on this, as he termed it, the most important step the Association had taken.

Dr. John P. Wagner, Chairman of the Committee on Publicity and Trade Practices, prefaced his re-

port with remarks outlining the work of the committee since its organization last April, the report being read by E. F. Glore, as follows:

Publicity Committee Report:

Pursuant to the text of the resolution adopted at the Tenth Annual Convention to render a report at the Mid-Year Meeting of the National Warm Air Heating and Ventilating Association, your committee has given careful thought and consideration to the subject of formulating a plan upon which the Bureau could function to the best interests of the industry.

A partial survey was made by your committee among the manufacturers, jobbers, dealers and installers, and among a goodly number of users of warm air heaters, in order to get a general idea as to the scope which should be given the Bureau in its expression.

Summing up in a few words the results of our limited survey, it may be said that it met with universal approval.

Your committee, in a general way, acquainted itself with the results which have been obtained by other industries throughout trade extension and commercial research and educational publicity work, and without exception we find that where research associations covering the commercial activities of an industry have been established, the trade possibilities of such industries have been greatly increased and brought to higher standards, not only in the production of the product, but in the sale and marketing of the same, as well as the maintenance and operation of the commodities manufactured by the various industries.

Among such successful operations we might mention here the zinc, cement, lumber, leather, glass, paint, brass and copper, furniture, electrical appliances, plumbing, and many others.

Your committee has, therefore, reached the following conclusions and recommends that the name of the Bureau be simplified to and be known as the "Trade Extension Bureau of the National Warm Air

Heating and Ventilating Association"—the Bureau to be divided into three group activities, namely:

1. Manufacturer

- (a) Commercial Research and Survey
- (b) Trade Statistics
- (c) Trade Sales Promotion
- (d) Competitive Stimulation
- (e) Educational Advertising Publicity
- (f) Improvement of Business Ethics and Marketing Conditions
- (g) Standardization of Products and Methods

2. Dealer

- (a) Educational Propaganda Promoting Better Merchandising and Service
- (b) Proper Display of Merchandise and Local Advertising
- (c) Competent Sales Methods
- (d) Adherence to Installation in Accordance with Furnace Code

3. Consumer

- (a) Educational Propaganda Dealing with Advantages of Warm Air Heating and Ventilating
- (b) How to Select the Proper Heating Plant
- (c) Education in Maintenance and Care of Warm Air Heating Plants
- (d) Data on Fuel Values

Mr. Glore moved the adoption of the report, and after this had been done, he moved that a special committee of three be appointed by the President to formulate plans in detail for the work of the Educational Research Bureau as well as for its financial support.

This committee is composed of the following:

E. F. Glore, New York City and Philadelphia;

D. Rait Richardson, New York City;

G. L. Bridge, St. Louis.

President Langenberg then called for expressions as to the outlook for 1924 business, the opinion being that a great deal of residence building would be done, which would natur-

ally make 1924 a good year for the Warm Air Furnace Industry.

At four o'clock the gavel fell on the motion to adjourn, and thus has been passed another important milestone in the road of progressive work of the National Warm Air Heating and Ventilating Association.

C. B. Noyes to Travel for Quick Furnace, Des Moines, —Formerly with Success Heater.

C. B. Noyes, formerly a member of the sales organization of the Success Heater Company, has joined the sales force of the Quick Furnace & Supply Company, Des Moines, Iowa.

In his new connection with the Quick Furnace & Supply Company, Mr. Noyes will travel the southern Iowa territory, where he will be of great assistance to furnace dealers because of his extensive experience in the furnace business.

C. B. Rose Must Provide Warm Air Inlet in Bath Room, Says William Scott.

In our issue of December 1, 1923, page 19, C. B. Rose, —, Missouri, explained a difficulty with which he has found himself confronted.

William Scott, —, Pennsylvania, has responded with a solution which he believes will clear up the difficulties of Mr. Rose as follows:

TO AMERICAN ARTISAN:

In your issue of December 1, C. B. Rose, —, Missouri, wants to be shown. Good. To begin with, the warm air pipe of the so-called pipeless furnace is large enough to take care of all the heat generated. Then, why should we expect any warm air to depart from its vertical course and start on a long horizontal journey to the bath room? It would not do so unless there is more warm air than the vertical pipe can carry.

Also, since there is no return from the bath room, the cold air already there will block the way of

any warm air that might seek admission. Indeed, the tendency would be for a small amount of cold air to flow down along the bottom of the bath-room pipe, thus forcing a small amount of warm air to travel in a contrary direction above it; but the movement would be too slow to be useful. You cannot force water into a bottle that is already full. The same principle applies to air in a room.

The fact that the bath-room pipe passes through a layer of cold air between the casings would militate very little against the efficiency of the pipe. The trouble would be practically the same if there were but one casing.

To remedy this condition, do as follows:

Use a wall register near the ceiling for the warm air entering the bath room.

Use the present floor register for the return air to be emptied in between the casings.

WILLIAM SCOTT.

—, Pennsylvania, December 3, 1923.

If You Wish to Build Good Will, Be Honest in Your Advertising.

Don't try to fake the public. When you advertise a special, give a truthful description, an exact illustration, and show it to your customer when he comes in. It is more desirable that your advertised special shall actually look better than the cut in the newspaper than vice versa. Remember Lincoln's maxim, "You can't fool all the people all of the time."

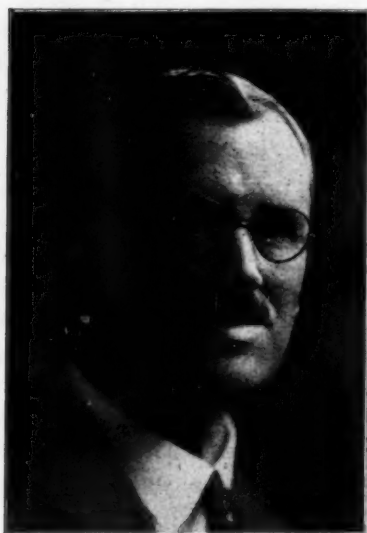
Many a dealer regards a sale as completed with the delivery of the merchandise. Little or no attention is given to complaints, after receipt of the money. It should be remembered that no sales transaction can be termed complete unless the customer is perfectly satisfied. Besides, and most important, a satisfied customer is the best advertisement. If you don't think so, ask any successful merchant.

Furnace Rating and Business Outlook Principal Features of Western Warm Air Furnace Meeting, Chicago.

Symonds Elected President—Menk Submits Label for Code—Sedgwick Shows Increasing Popularity of Code.

THE members of the Western Warm Air Furnace & Supply Association were exceedingly happy to find that Secretary John H. Husie was again able to be in their midst, after a prolonged illness, at the meeting of the Association held in the Tiger Room of the Sherman Hotel, Chicago, December 5, 1923, with about seventy-five members in attendance. Many of the members had attended the meeting of the National Warm Air Heating and Ventilating Association held at Urbana, Illinois, the day before. President E. L. Jaynes called the meeting to order promptly at 10 a. m. The meeting was opened with the President's annual address, which is as follows:

In his annual address at the Western Warm Air Furnace &



E. L. Jaynes,
Retiring President Western Warm
Air Furnace & Supply
Association.

Supply Association meeting, Chicago, December 5, President Jaynes spoke to those present as follows:

President Jaynes' Annual Address

Looking back over the history of the Western Warm Air Furnace & Supply Association, I am proud of the work accomplished, work the value of which no one here can fully estimate. If we had accomplished no other thing than the

adoption of the Code regulating the installation of Warm Air Furnaces, I should consider the Association had been well worth while. But some may say, the Code is not followed. True, it is not followed by all furnace men, but it can be, and it will be followed, if the members of this organization alone will but enforce it in connection with their own business.

I want to say now, that there perhaps was not a town in the United States where the Warm Air furnace industry generally was in any worse condition than in the Twin Cities a few years ago. As late as ten years ago, if a man contemplated building a home, he always figured to put in hot water heat. He was told by the real estate dealer that he could not sell a home to advantage if he had Warm Air heat in it, but the influence of the firms who have stood for the things that are now embodied in the Code has been such that the business has risen in the estimation of the public mind until there is today no town where you will find the business on any higher plane, and high-class work is not confined to one or two firms any more. Several firms who five years ago were doing the rottenest kind of work are now doing very fair furnace work, and today real estate dealers are advocating the use of Warm Air in all moderate sized buildings.

The work of this Association has not been confined to the Code, however. We have succeeded in starting another movement, which resulted in bringing the manufacturers of registers to an agreement to standardize sizes, etc., which we anticipate will be of untold benefit to the Warm Air furnace industry.

Determining Size of Furnace

We must not permit this work to stop here. Your President feels that this Association might well take up the matter of standardizing the rating of furnaces. In our Code we have said nothing about how to determine the size of a furnace to be used. I understand, of course, that the National Association and the University of Illinois are working on that now, but it will be some time before anything definite is given out by Professor Willard. It would seem wise to me therefore, that this Association adopt some sort of rule to be followed until such time as a better one is worked out, and as such a rule I am going to suggest the following:

After determining the combined area of all Warm Air pipes, in accordance with the Code, select a furnace having a grate, the area of which will equal two-thirds of the area of the Warm Air pipes in square inches. This rule can be best illustrated perhaps by reversing the proposition, and saying that a furnace having a grate eighteen inches in diameter would heat 381 square inches of Warm Air pipe area, one having a 20-inch grate would heat 471 square inches, a furnace having 22-inch grate, 570 square inches of Warm Air pipe area, and so on.

These figures have been arrived at by taking the area of the grate in square inches, and adding 50 per cent. Further, they are based on heat losses as determined by our present Code, and on returning the air to the furnace at 60 degrees, and delivering it at 195 degrees, at the register, and burning between three and four pounds of coal per hour per square foot of grate area, when the thermometer is at zero outside.

I believe that grate area is the proper



H. W. Symonds,
President-Elect Western
Warm Air Furnace &
Supply Association.

basis for rating furnace capacities. Some furnaces will, of course, be more efficient than others, but the difference is not great, and until each make of furnace is finally and thoroughly tested, there will always be much controversy and difference of opinion and prejudice. It is this controversy I should avoid by leaving out of the question entirely any reference to efficiency, and base the rating on the cold question of grate surface only.

I think there are a few things this Association might discuss at the present time to the advantage of all of us, and that is the business conditions throughout the agricultural districts, and especially in the northwest.

How President Jaynes Views Business Situation

Take the Dakotas, Montana, Minnesota and Iowa, and it is largely an agricultural district, and while the prices the farmer has been able to get for corn and cattle and hogs have been quite satisfactory, yet the prices of wheat and all small grains has been such that the farmer is unable to pay expenses, and there is a condition prevailing in the smaller towns throughout the northwest among the dealers handling furnaces that is certainly deplorable, when you come to stop and figure that a plasterer in the larger cities is able to get as much money for eight hours of his time as a farmer is able to get from an acre of land for a year of his time, including all of his investment, it is quite certain in my mind

at least, that there is great need of adjustment.

Personally, I do not believe the matter calls for National or State legislation. I do not believe the evil can be cured by legislation. I believe rather that diversified farming, and a larger measure of dairying on the part of the farmer is going to be the only solution of the problem, but it is going to take a number of years for the farmer to make this change in some parts of the territory, and in the meantime the question



John H. Hussie,
Re-Elected Secretary
Western Warm Air
Furnace & Supply
Association.

is raised in my mind, what are we as jobbers and manufacturers going to do to help. Is it going to be good policy for us to sell to the country merchant on long time datings? Is it going to be good business policy for us as jobbers and manufacturers to attempt to carry in any measure the country merchant, so that he can give inducements to the farmer that will enable the farmer to put in a furnace during 1924?

Will a reduction of prices to the country merchant, and by him to the farmer cure the situation, and if so, where is that reduction going to start? The country merchant cannot make it, and continue to pay the jobbers or manufacturers the present range of prices. Now, can the jobber make any further reduction without a reduction from the manufacturer? It would seem to the writer like poor business policy for the jobber or manufacturer or both to make a reduction in prices, cutting off all their margin, or even a part of their margin, if such a cut is not going to result in a large increase of business.

During the past year furnace business in the larger cities in our territory has been good. The building of homes in the city of Minneapolis broke the record, and a large percentage of these homes were heated with Warm Air furnaces as compared with years past. The present outlook for home building in 1924 is fairly good, provided there is a reduction in the cost of building materials and labor. I seriously question a large building boom if prices hold, or advance in all lines. I think this phase of the present situation, and the prospects for 1924 might well be discussed at this meeting.

We have with us some men whom I know you will enjoy hearing, and as we have to elect officers for the ensuing year, and select a place for our next meeting, and as the time is going to be somewhat limited, I shall now turn the meeting over to you.

Before doing so, however, I want to thank you for having had the privilege to serve you as President of the Association, and also to congratulate you on the success of your efforts up to the present moment.

The minutes of the previous meeting and communications were read immediately following the President's address.

Secretary Hussie's report was then made.

The Treasurer's report showed the finances of the organization to be in very good condition.

The report of the Standardization Committee was made by Chairman R. W. Menk, as follows:

Standardization Committee Report.

Your Standardization Committee is pleased to report that the past year has truly been one of much progress.

The Code is a yardstick. It paved the way for more uniform and successful warm air installations. The standardization of registers is the second great step.

Standardization means a larger production of a smaller number of unit sizes of registers, stack heads and fittings; money invested in stocks of which there is an assured demand; larger stocks of a limited number of sizes assuring prompt delivery.

The spirit of coöperation as a whole has been unusually fine. We cannot overlook mentioning the efforts of the Department of Commerce, especially the willingness of the Department of Simplified Practice through R. M. Hudson to coöperate to the fullest extent, and to make special mention of their desire to help us make a survey of the industry along these lines.

The resolutions adopted at the semi-annual meeting in St. Louis in June (pertaining to register standardization) were carried out as requested, both as to the Chicago and New York meetings and copies of the minutes of both meetings were sent to each member of our Association, also to secretaries of allied associations interested therein and to the trade journals.

While the committee experienced some difficulty in bringing the New York meeting to a head, the actions of both meetings have been widely commented upon and much interest aroused. A large majority of the register, fittings and furnace manufacturers, jobbers, dealers and installers appear to be enthusiastic over the progress that has been made.

Present Situation.

Four of the largest register manufacturers will be ready to announce the new sizes together with cuts and prices in the near future. Four at least are working on new dies. Two are contemplating making new dies, and several others are awaiting developments.

One register manufacturer says that some of his largest buyers have advised against any changes, but with no definite reason. Another says that they object to the two largest sizes of first floor baseboard registers, claiming also that certain of their large buyers are also objecting, and that register projections decided upon were too large, but further stating that they are working on the other sizes.

There is one angle to the entire standardization program that should be clarified, the same being that some manufacturers, a few jobbers and quite a number of installers are, or were of the opinion that no other baseboard registers would be manufactured in the future, except those sizes adopted as standard. The situation and understanding, however, was and is that the sizes adopted are the ones that were to be recommended as proper for the various size leader pipes. But any manufacturer or jobber was at liberty to make and sell any sizes that their trade demanded, especially if the demand was of sufficient volume to warrant their manufacture, and right here your committee wishes to state that it is hoped that all jobbers and dealers will request of manufacturers the registers in sizes adopted, at least at their earliest convenience, realizing, of course, that there are many stocks of registers in the country that must be moved, and that jobbers and dealers will coöperate with one another in an effort to clean up these stocks of irregular sizes at the earliest possible moment. It is further suggested that every circular or catalog illustrating



J. B. Fehlig,
Re-Elected Treasurer Western
Warm Air Furnace &
Supply Association.

registers feature the standardized sizes in some manner, in order that they be outstanding as the standard, and a card of some sort featuring them to be hung in shops and offices would tend to increase the demand for same.

Another feature that seems to have received some criticism is that of the failure to adopt or recommend a register size for 14-inch warm air leader, which can be explained in part as that the demand for this size did not constitute a large volume of the total registers used and were satisfied to

allow this size to be withheld awaiting a future time, and others expressing themselves that the 12x14-inch adopted for 12-inch leaders was sufficiently large in the majority of cases for 14-inch leaders.

At this juncture of the program President Jaynes introduced H. De Witt Valentine, Assistant Manager, Heating Department Peoples Gas, Light & Coke Company, Chicago, who spoke quite extensively on the "Controlling Factors Which Will Determine the Efficiency of Gas for House Heating."

Mr. Valentine elucidated upon the factors and obstacles which will have to be overcome before the application of gas can become more general in connection with warm air furnaces.

The entire project, Mr. Valentine said, devolved upon two considerations: First, that the burner must be of a special construction; secondly, that the burner would of necessity have to be housed in a cast iron housing, in order to eliminate the noise resulting from the constant expansion and contraction of the thin metal when the burner was turned up or down.

In regard to the conductivity of heat, Mr. Valentine took his listeners back to their school days, citing the elementary laws of physics to explain his views on radiant heat and heat conductivity.

Asked whether or not a flue were necessary with the gas installation, Mr. Valentine stated that the gas company refused to make an installation unless adequate flue provisions were made.

An electrical pilot light was also being developed in the gas company laboratory.

The following committee members were appointed by President Jaynes before adjournment for the lunch hour:

Nominating—R. W. Menk, V. H. Parks and R. W. Blanchard.

Membership—R. D. Wiechert, A. Nestor and E. I. Dodd.

Resolutions—George Harms and P. A. Johnson.

Auditing—Blair Quick and Samuel Burgess.

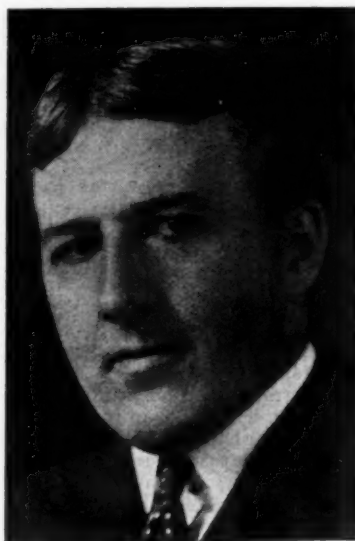
Afternoon Session.

The afternoon session of the

meeting was opened with the reading of the Furnace Rating Committee's report by George Harms. Some of the most important features of this report are embodied in the President's annual address appearing at the beginning of this report.

At this time Miss Etta Cohn, Manager AMERICAN ARTISAN, was given a vote of thanks for the cigars smoked at the meeting.

F. G. Sedgwick, Vice-President Waterman Waterbury Company, Minneapolis, addressed the assembly, showing that the use of the



R. W. Blanchard,
Retiring Vice-President West-
ern Warm Air Furnace &
Supply Association.

Code is growing in favor by the installers. Mr. Sedgwick quoted from a questionnaire which he, at considerable expense to himself, had sent out to 1,000 installers, asking them sixteen questions pertinent to the Warm Air Furnace Industry. His address appears on pages 19 to 22 of this issue.

Mr. Sedgwick received a rising vote of thanks for his contribution.

Dr. John P. Wagner, as Chairman of the Publicity Committee, was then asked to report for his committee.

Dr. Wagner stated that in order to produce some real effective publicity the various factors of the industry would have to be segregated, in order to avoid misunderstanding by the public. It was the opinion of Dr. Wagner that in 1924 a directory

and a committee of research be established. In this way the distributors will be brought to a high point of efficiency. The Educational Research Committee should be given every possible assistance.

A motion was made and adopted to thank the trade journals for their continuous and zealous support.

Allen W. Williams then gave his address, which will be found on pages 22 and 23 of this issue. Mr. Williams said that he believed it was up to the manufacturers to increase the use of the Code, but the distributors must take a positive stand in its favor also.

President Jaynes then introduced Professor E. A. Stewart, from the University of Minnesota. Professor Stewart expressed himself as having been highly pleased with the talk given by H. De Witt Valentine during the morning session. He said that he heartily agreed with Mr. Valentine in saying that when a person or an organization was thoroughly grounded in the fundamentals of a work, fewer stumbling blocks were encountered. He noted also that L. W. Millis, of Kansas City, was also progressing along similar lines in his articles which appear in AMERICAN ARTISAN from time to time.

Professor Stewart said he believed information on heating should reach students in high schools and grade schools. He also stressed the importance of the research work.

Edwin L. Seabrook, Secretary National Association of Sheet Metal Contractors, Philadelphia, was also introduced. He said that manufacturers should not bemoan poor installations. He was positive in his belief that the Warm Air Heating Industry was on the upgrade. He said that he knew there were hundreds and thousands of first-class installers who were doing first-class installation work.

He also said he did not believe that the competitor of Warm Air Heating (hot water) would ever overtake the former.

He believed that more educational work should be done by the manufacturer, and that the architect was

one of the men they must reach. "Above all," said he, "don't knock, give the industry a boost."

The Auditing Committee then reported the accounts to be in good condition and recommended that the Treasurer's report be accepted with thanks. This was done.

Chairman R. W. Menk, of the Nominating Committee, then submitted the following names of the men who were elected as officers for the ensuing year:

President—H. W. Symonds, of Symonds Register Company, St. Louis, Missouri.

Vice-President—Blair Quick, of Quick Furnace and Supply Company, Des Moines, Iowa.

Secretary—J. H. Hussie, of John Hussie Hardware Company, Omaha, Nebraska, re-elected.

Treasurer—J. B. Fehlig, of Excelsior Heating Supply Company, Kansas City, Missouri, re-elected.

D. E. Cummings of Thatcher Furnace Company, and E. L. Jaynes of Northwestern Furnace & Supply Company, were elected to the Executive Committee.

Blair Quick then extended an invitation to hold the semi-annual meeting at Des Moines, Iowa, which was accepted by vote.

A vote of thanks was given E. L. Jaynes, retiring President, who then relinquished the chair to President-elect H. W. Symonds, who opened the "Start Something Hour."

Start Something Hour.

R. W. Menk started something which he said he would also finish, by suggesting that a metal sign be furnished at cost by the Association to the installer, to be hung up in the latter's window.

The sign as presented by Mr. Menk was inscribed with the words, "Warm Air Heating Systems Installed in Accordance With the National Standard Code, Endorsed by Western Warm Air Furnace & Supply Association." Mr. Menk was of the opinion that such a sign used by installers would establish greater confidence in Warm Air Heating Industry and at the same time tend to fix responsibility for proper installations upon installer. Such a

movement would counteract poor installations done by some installers. The good installers will undoubtedly appreciate this movement.

The subject created considerable discussion, and while no definite action was taken, this important subject was presented and will, no doubt, receive serious consideration at future meetings and also by the manufacturers individually.

Sedgwick Finds National Code Generally In Use Where Installers Are Acquainted With It.

Learns By Questionnaire That Warm Air Heating Has Gained Ascendency Over Hot Water Heating to a Large Extent.

THE following address by F. G. Sedgwick, Vice-President of the Waterman Waterbury Company, Minneapolis, Minnesota, was read before the members of the Western Warm Air Furnace & Supply Association, Hotel Sherman, Chicago, December 5, 1923:

A friend of mine who is the head of a million dollar retail merchandising concern in Minneapolis, a business that has successfully merchandised every conceivable line of household equipment, including furnaces, asked me one day why I stayed in the furnace business.

My natural reply was, "Why not?"

His answer floored me. "Why, there is no future in the furnace business. It always has been, and always will be, a business of price competition. Dealers always have and always will scrimp installations to the point that good service can not possibly be given. This has always been true in the past, and I see no reason why it should not be true in the future."

If those remarks had come from a cut-price furnace dealer, or one who had not been successful in the furnace business, they might not have jarred me quite so hard. But coming, as they did, from a successful merchant and one who had successfully sold furnaces at a higher price than that prevailing, building up a volume of around 800 furnaces annually, they set me thinking. I haven't stopped thinking about it yet.

When Mr. Jaynes was so kind as to offer me the opportunity of appearing before you, he asked me if I had anything on my chest of which I would like to unburden myself.

I told Mr. Jaynes that I was burdened with something and that I was sure that I would feel better if I got it out of my system.

Sends Out Questionnaire.

But it hardly seemed right for one of my comparatively few years in the furnace business to stand up before such men as you and preach to you from my

The following applicants for membership were accepted before adjournment:

Carr Supply Company, Chicago;

G. G. Fischer, Chicago representative Abram Cox Stove Company, Philadelphia, Pennsylvania;

Furnace Fan Corporation, Dowagiac, Michigan;

Farris Furnace Company, Springfield, Illinois.

own observations, so I addressed a letter to 1,000 representative furnace dealers throughout the United States just to see if my opinion of the furnace business was the trade's own opinion of itself.

I am, peculiarly enough, happy to say that my opinion is absolutely verified by the trade.

I am happy because I am firm in the belief that once the trouble is found and acknowledged, the remedy can be found and applied.

In sending out this questionnaire to 1,000 dealers, I did not expect to get 1,000 replies back. I know furnace dealers well enough to know that they are not equipped generally to take care of correspondence and office work. I did, however, expect to get about 15 per cent of replies, and I did expect that 15 per cent would show the average opinion of the industry.

I was somewhat disappointed in the number of replies. Ten per cent of replies were received instead of 15 per cent. The exact number of usable replies being 102, but I am satisfied that if the number were increased to 20, 30, 40, 50 or even 100 per cent, the results would not have been materially different, for the replies were from widely scattered centers and from widely different types of dealers.

Some questions were asked in the questionnaire that I should not ask again; others would have been asked differently, but we must deal with the questionnaire as it stood and not as I should have it if I were to do it over again.

What Letter Contained.

The letter that was sent out on the letterhead of the Waterman-Waterbury Company read as follows:

What Can Furnace Manufacturers and Jobbers Do to Improve Your Furnace Business?

I have been asked to write you and one thousand other furnace dealers to find out what we jobbers and manufacturers can do to increase your furnace sales and to report the results at a meeting to be held in Chicago, December 5.

This is your opportunity to get your views before the manufacturers and jobbers of the country. I am sure that you are sufficiently interested in your business to take the five minutes that will be required to fill out the questionnaire on the reverse side of this letter and mail it to me in the enclosed envelope.

To pay you for your trouble, we will mail you a summary of the opinions of all of the dealers to whom this letter is addressed shortly after December 5.

You do not need to sign this questionnaire. Your name will not be used; you will not be quoted; we simply want your honest opinion.

Furnace manufacturers and jobbers are doing things these days and you can be reasonably sure that any suggestions that you may make as to how the business may be bettered will have their careful consideration, and will result in improvement to the business as a whole.

May we depend upon you to fill out this slip and mail it now before you lay this letter aside? Five minutes will do it.

For the good of your own business, please turn this sheet over and answer the questions now.

Yours for Better Heating,
F. G. SEDGWICK.

On the opposite side of the letterhead appeared the questionnaire.

What the Questionnaire Asked and How It Was Answered.

It will not be necessary to quote the questionnaire, as each question contained therein is given hereinafter with the answers.

Now, reverting to the first question. It is my purpose to go through the questionnaire and give you the average results as gleaned from the replies.

Divides Installers Into Four Groups.

Question 1. "Give population of your city"—resulted in a variety of answers, which, of course, could not be averaged with any gain to our ultimate end, so for the purpose of comparison, I thought it best to group the replies according to population of cities into four general groups.

Group 1 comprises all replies from towns of less than 1,000 population; 19 per cent of replies were from this group.

Group 2, comprising 34 per cent of the replies, was from towns of from 1 to 10 thousand population.

Group 3, comprising 26 per cent of the replies, was from towns of from 10 to 50 thousand population.

Group 4, comprising 21 per cent of the replies, was from towns of over 50,000 population.

You will see that these replies are pretty well divided—19 per cent, 34 per cent, 26 per cent and 21 per cent, respectively.

I want to give full credit to those dealers who replied to the questionnaire. Their replies were complete and showed an interest in the subject under discussion. In spite of the fact that the dealers were particularly cautioned that it was not necessary to give their names, all but twelve of those replying signed the questionnaire.

Permanence of Installer.

Question 2. How long have you been in the furnace business?

The replies varied from "just started" to "48 years." The average of group 1 was 7 years, the average of group 2 was 14½ years, the average of group 3 was 16 years, and the average of group 4 was 21 years.

It is evident that the dealer in the larger city is the more permanent dealer.

Question 3. How many furnaces do you sell in an average year?

The numbers ranged from one to 1,500. The average of group 1 was 6, of group 2 was 14, of group 3 was 60, and of group 4 was 250.

Question 4. How many competitors have you?

The numbers ranged from none to 87. The average of group 1 being 2; of group 2 being 4; of group 3 being 10, and of group 4 being 32.

Popularity of National Code.

Question 5. "Are you acquainted with the National Code?" And here is where we begin to get at the meat of the situation.

The National Code has been published now for nearly two years and it would seem that almost any progressive furnace dealer should now be acquainted with the National Code, but the answers are convincing to the contrary.

In group 1, 10 per cent were acquainted with the National Code, 90 per cent were unacquainted with it.

In group 2, 20 per cent knew of the Code and 80 per cent did not.

In group 3, 52 per cent knew of the Code, 48 per cent did not.

In group 4, the larger cities, 48 per cent knew of the Code, 52 per cent did not.

Do you realize that this means that even in the larger centers only half of the dealers at best know of the National Code?

Question 6. Do you figure your jobs according to the new National Code?

I hoped with this question to be able to determine the popularity of the National Code with the dealers.

In group 1 all those who were acquainted with the Code used it.

In group 2 half of those who were acquainted with the Code used it.

The same was true of group 3.

In group 4, you will remember that 48 per cent had stated that they were acquainted with the Code. Thirty-seven per cent used the Code, or approximately 77 per cent of those who were acquainted with it, use it.

Question 7. Asked those who were acquainted with the Code, but who do not figure their jobs according to the Code, why.

The answers varied considerably. One said the Code is good for large jobs only.

Some stated that local Codes, or Codes used by themselves for a number of years, gave similar results.

In group 2, one dealer said he could not meet his competition if he figured according to the Code.

Two dealers made the same statement in group 3, and in group 4 one dealer pointedly remarked that he would not sell many heaters if he figured in accordance with the Code.

Warm Air Furnace In Ascendancy Over Hot Water.

Question 8. Are there more hot water plants than warm air plants installed in your city?

The answers to this question surprised me. I did not think that warm air had

so completely gained the ascendancy over hot water, but in group 1, 95 per cent reported more warm air plants than hot water. Group 2, 90 per cent; group 3, 96 per cent, and group 4, 80 per cent reported more warm air plants installed than hot water.

Of course, it must be borne in mind that these are estimated figures, but they indicate the general trend. Two dealers reported from Chicago, both agreeing that there were more hot water than warm air installations in this city.

I thought that by asking Question 9—"Are your sales principally to contractors or to home owners?"—that I could classify the dealers to better advantage, but again I was surprised at the greater number of dealers selling to home owners than to contractors.

In group 1 all of the dealers sold to home owners.

In group 2, 86 per cent sold to home owners, 14 per cent to both home owners and contractors.

In group 3, 69 per cent sold to home owners exclusively, 30 per cent to both home owners and contractors, and 1 per cent to contractors exclusively.

In group 4, 60 per cent sold to home owners exclusively, 24 per cent to contractors and 16 per cent to both home owners and contractors.

It is probable that the 24 per cent reporting in group 4 as selling to contractors exclusively sold more furnaces than the 60 per cent selling to home owners, but I did not take the time to check this back.

I might add here that the largest number of furnaces sold by any one dealer in a year was 1,500. There were two dealers reporting that number.

Express Dissatisfaction With Volume of Business and Profits.

Question 10. "Are you satisfied with your volume of business?" proved to be a foolish question. No live dealer is satisfied with his volume of business. If it were not for this development, something might have come from Question 10, but as it is, the replies ranged from 66 to 87 per cent not satisfied with their business.

Question 11. "Do you think that you make a sufficient margin of profit in your business?" is more interesting.

In group 1, 45 per cent do not think that they make a sufficient margin of profit.

In group 2, 55 per cent do not think that they make a sufficient margin of profit.

In group 3, 70 per cent do not think that they make a sufficient margin of profit.

In group 4, 60 per cent do not think that they make a sufficient margin of profit, and report that they are unable, on account of competitive conditions, to make a fair profit out of their business. This question and its answers are also significant.

Installers' Estimation of His Own Business.

Question 12. "What percentage of furnace jobs installed in your city would you estimate to be properly installed?" is another important question, and one to which we probably all know the answer. Here you have the dealer's own estimate of what he thinks of his own profession. What percentage of the furnaces in your city would you estimate to be properly installed; in other words, are you proud

of the service that you and your competitors are giving, or are you ashamed of it? Do you think you are the only one in the city who is installing his heating jobs properly, and if so, on what do you base your opinion?

The percentages, of course, are inaccurate and indicate only the general opinion. Some dealers said that it was foolish to ask such a question, as they kept no record, but what I was after was the trade's own opinion of itself, and I got it.

In the smaller group, 68 per cent; group 2, 53 per cent; group 3, 43 per cent, and in group 4, 32 per cent of the installations are, in the opinion of the dealers themselves, properly made.

No dealer of the two larger groups estimated that all of the installations were properly made, the largest estimate of these two groups being 80 per cent, and the lowest 2 per cent, which probably represented that dealer's own installations.

What protection has a public from a trade which admits that less than half of the installations are properly made? I know it, you know it, we all know it, and yet we expect this business to prosper and grow as it should.

Until we remedy this condition, we are doomed to continue in the rut of price competition, cheap jobs, business that never satisfied anyone, and at the end of it all meet our Maker with a confession of a gigantic swindle, affecting not only the comfort, not only the pocket-books, but even the health and lives of His people.

Question 14. "What average price do you get for a pipe furnace installation?" resulted in answers, averaging \$284.00 for group 1; \$287.00 for group 2; \$294.00 for group 3; \$263.00 for group 4.

The average prices reported ran from \$125.00 to \$450.00.

Attitude Toward Educational Campaign.

Question 15. "If furnace competition in your city is such as to make profitable sales difficult or impossible, do you think that a campaign of education backed by furnace manufacturers and jobbers and dealers would improve the situation?" was asked with the present agitation for national advertising, of which you have heard reports at this meeting, in mind.

The answers are interesting, but not material to this questionnaire.

In group 1, 53 per cent thought that such an educational campaign would improve business, 21 per cent thought not, 16 per cent were doubtful, 10 per cent gave no opinion.

In group 2, 71 per cent thought that the campaign would improve business, 14 per cent thought not, 9 per cent were doubtful, 6 per cent gave no opinion.

In group 3, 82 per cent thought that the campaign would improve business, 9 per cent thought not, 9 per cent doubtful.

In group 4, 81 per cent thought that the campaign would improve business, none thought not, 14 per cent were doubtful, and 5 per cent gave no opinion.

How Should Manufacturer and Jobber Cooperate to Help Installer?

Question 16. Is there any other way in which you think the manufacturers and jobbers could cooperate with you as a dealer to improve the furnace business?

This question brought out many local jealousies. You could read local competitive conditions in these answers, but

generally the answers, bearing on any one subject, were not in sufficient numbers to prove valuable.

One dealer suggested that we show the dealer how to finance his business.

Another suggested that all installers be licensed.

Another said, discontinue selling to contractors.

Another one, educate manufacturers and jobbers.

Another, stop making cheap furnaces.

Two recommended that we advertise quality.

Three asked that we do something to eliminate cheap competition.

The same number suggested we advertise nationally.

Four recommended that we educate the public to demand good heating.

Four asked that the manufacturer and jobber help the dealer to sell.

Six asked for cooperation in local newspapers.

Seven asked that we educate dealers to install furnaces properly.

Thirteen demanded lower prices.

Fifteen said, let manufacturers and jobbers sell to furnace dealers only.

In my opinion, every one of these suggestions points toward the suggestion that I am about to make. Even those dealers who want lower prices are trying for the same result, except that I think they are trying for the result in the wrong way.

Obviously this questionnaire has crystallized what we all know to be true, that we are in a business in which there is a woeful lack of education on the part of the manufacturers, jobbers, dealers and public, and that this business goes on year in and year out, living only because of its inherent excellence and suffering continually from the faults that are inflicted upon its own friends.

Warm Furnace Has Wonderful Flexibility.

Did you ever stop to think that if it were not for the wonderful flexibility of the warm air furnace, the public would have swept us off the map years ago?

Every range of temperature from 70 degrees up to 600 degrees register temperature is within our scope. We are not confined to the boiling point of water. We have a flexibility that is unequaled by any other medium of heating, and it is that wonderful flexibility or adaptability that has saved us what we have of the business.

But the price of hot water heating apparatus is coming down some day in the future, and when this time comes, people are going to look upon warm air as a cheap substitute for hot water unless we do something to forestall this probability. The solution is easy. Educate first the manufacturers, then the jobbers, then the dealers, and then the public to discriminate between good warm air heating apparatus and poor warm air heating apparatus.

But the best way to do this is another question of greater magnitude. Personally, I believe that the Trade Extension Bureau, as suggested by the Publicity Committee at yesterday's meeting of the National Association, is a step in the right direction.

A dealer in Lincoln, Nebraska, said to me a year ago that he was disgusted with the manufacturers and jobbers of warm air heating apparatus. He said first you choose the slogan, "Fresh air means health." That is fine as far as it goes,

but the next thing you know every manufacturer of inefficient heating apparatus is using that slogan to protect himself at the expense of those who are really trying to manufacture good heating apparatus.

Then, he said, you decide to call it warm air heat instead of "hot air," and the first thing you know every furnace dealer, whether he knows anything about it or not, is talking warm air without any material change to his way of installing furnaces.

Then someone comes out with a moist air heater, and every manufacturer with a tin cup in the side of his casing calls his furnace a "moist air furnace."

The public does not know how it has been buncoed in each of these instances, but it feels that there has been something wrong and it blames the hot air furnace.

I am close enough to the workings of this Association to know that when you make up your minds that a thing is right you stick to it until you get it.

Some Slogan Should Be Adopted.

So I am going to make my suggestion to you, so that you can think it over, talk it over among yourselves, and if you feel that there is anything worthwhile to it, I know you will see that it is put across, and in any constructive work of this kind that you may do you may be sure my Company and I will be glad to lend you what help we can. My suggestion is that those who really desire good furnace installations band themselves together under a descriptive name or title. The name is illustrated by the word "Sun-kist" for oranges, and the title is illustrated by the word "Realtor" for an honest real estate dealer. This word must be copyrighted or trademarked, or whatever is the proper thing to do to protect it from infringement, and no furnace manufacturer, jobber or dealer should be allowed to sell his furnaces under that distinctive name unless he subscribes to the conditions laid down by what we know to be proper installation methods. The basic features of such a scheme are admirably provided for by the Trade Extension Bureau above referred to.

Proper Installation Methods.

The fundamentals of proper installation methods are in our hands already. They consist in part of the following:

1. Figure every job. Figure according to the National Code (less the fire insurance underwriter's provisions if you wish).

2. Choose a furnace easily large enough. The University of Illinois should have some information for us on this shortly, but until that time a rule of thumb method of rating furnaces can be devised that will meet the situation nicely.

3. Insist on the use of proper transition fittings on both warm air pipes and cold air returns, and of register boxes and faces of sufficient free area.

These items are, I believe, covered in the National Code.

The expense of such a plan can be made either great or small as you wish, but even at a small expense a great deal can be accomplished.

A group of a dozen manufacturers and jobbers, two dealers in one town, both talking for the same kind of installations, would mean a wonderful improvement in the business, and it is my opinion that the thing would grow

through publicity in the trade papers and through the advertising that it would give to itself.

Back up such a suggestion with a national advertising campaign and you greatly lessen the term of years that would be required for its success, but succeed it will under either condition.

Let every furnace manufacturer, jobber or installer subscribe to certain terms (perhaps it might be well to incorporate a code of ethics), make him pay for the privilege of using this title or name; make him pay annually; revoke his license if he fails to live up to the terms of his agreement.

Advertising Must Be Protected Against Unscrupulous Fellow.

But it isn't my purpose to go into the details of this thing here. There were two ideas that I wanted to get across to you. The one that the situation is bad and admittedly bad—admitted by the trade itself. Why haven't we courage enough to attack our problem when it is so clearly defined for us?

The second point is that any advertis-

ing that you can do is a failure unless it is protected, unless the unscrupulous fellow, the price cutter, the cheap installer, is absolutely prevented by force from taking advantage of the advertising of others.

Many of the details of such a scheme are worthy of as much thought and time as I have given to this summarization.

I believe that we will find many manufacturers, many jobbers, many dealers, who will be glad to coöperate on such a basis.

The alternative is a simple repetition of what has gone on before, with the gradual relinquishment of the control of the situation back to hot water as soon as prices become readjusted, and it is my prediction, that as this trend becomes evident to the industry, manufacturers and jobbers will be found to be frantically endeavoring to protect their own interests by cutting out the dealer and selling furnaces direct to the trade in the larger centers along ideas of distribution that have been pretty well worked out by successful companies in the field.

sincere and practical effort to take advantage of what to my mind, is a real opportunity for warm air heating and which is a serious mistake to regard with indifference.

Almost Like Topsy's Growth

Here's the situation as I see it. About twenty years ago, warm air furnaces began to be used in some considerable quantity as a method for heating. Probably 30,000 installations is a fair figure as to the extent of the yearly installations at that time and in spite of the fact that most of those installations were largely guess work and the warm air furnace was ridiculed by the makers of other systems, it possessed real merit and since that time the demand has steadily increased until 400,000 warm air heaters as an annual output is today a conservative estimate.

We have progressed nicely, if without much profit, so far, but we now approach a stage where continued growth in volume and popularity, however well deserved, cannot fairly be expected unless the manufacturers, jobbers and dealers not only take advantage of the means now at hand to enthruse themselves and the public as to the best method of home heating, which is of course warm air, but more important still actually use these means that are now ours and make a real effort to sell heating plants and not simply furnaces.

Furthermore a special effort to make the most of our opportunity is essential in order to overcome such falling off in home building as is bound to occur from time to time regardless of true or fanciful statistics as to the large shortage of dwellings or that the normal annual requirement of new dwellings is given by the Bureau of Census as 310,000 and a government authority states 100,000 homes are destroyed by fire, obsolescence and alteration for other purposes, each year.

Greater Self-Appreciation Needed

Someone has said that the public estimation of an industry is just what an industry thinks of itself and in the past we have not raised the standard of public good will or

Allen W. Williams Sounds Clarion Call in His Address Before Western Association.

Urges a Clearer Appreciation of Installers' and Manufacturers' Duty to Industry and Consumer and Points to Advantages Already Secured.

AT THE annual meeting of the Western Warm Air Furnace & Supply Association, Allen W. Williams, Secretary of the National Warm Air Heating and Ventilating Association, delivered the following inspiring address:

"Our Opportunity"

First of all I desire to acknowledge the compliment of this chance to briefly address your Association.

When your Secretary and my good friend, Mr. Hussie, sent me the invitation to be with you today, he also inquired what I would like to talk about. I told him I did not enjoy public speaking any more than his members enjoyed hearing me, but since that seemed to be fifty-fifty, I would try to say something upon the subject of "Our Opportunity," because I honestly believe the warm air furnace industry will have an unusual one during the coming year and that the more this fact can be impressed upon the manufacturers and dealers, not as sage advice, but as a plain fact, of vital importance, the better it will be for all concerned.

There is also a responsibility involved which rests upon our Associations and their individual members, for 1924 is not only our opportunity but it seems to me a crucial year for warm air heating. It appears to actually challenge us, which challenge we are fortunately well prepared to meet.

The trouble is we become so accustomed to comfortable conditions and advantages that surround us, that we are apt to accept them as a matter of course and to feel sure that they will continue, and we are prone to think they may be secured by simply thinking the desired results will come and "George will do it," but let me say to you with all earnestness that they will not stand absent treatment in 1924.

I may not be presenting anything that is new to you, but perhaps it will serve to remind you of the possibilities which 1924 has in store for us.

I do not have in mind a chance for so-called uplifting stuff or a general reformation to be led by some hero or heroes, but rather a

our own self-respect by a certain ambition to produce along with better goods, the cheapest possible thing, regardless of quality, in the way of a heater or by the hit or miss rules for installation which came from a lack of engineering data and for which in the past there has been some excuse, but for which there is none now.

You have heard so much about the mistake of pushing goods of poor quality that I hesitate to refer to it further, nevertheless I am going to add that none of us should be satisfied until the consumer knows beyond a doubt that there is no more economy in buying a warm air heater on price alone, than there is in becoming the unhappy possessor of a dollar pair of shoes and that a makeshift furnace is not a warm air heater, but a thing apart.

Statement of Assets

We will enter the new year with these advantages and in them is our present and practical opportunity:

1. Proven data as to correct engineering in warm air heating.
2. A standard Installation Code.
3. A prospect for wide and right publicity.
4. Improvements in older accessories and new ones of merit.
5. No heavily advancing costs.
6. Small stocks in the hands of manufacturers and dealers.
7. A marked improvement in the display rooms of dealers.
8. More than normally good prospects that home building in quantity will continue.
9. A larger need of replacements.
10. An improvement in our business ethics.
11. Substantial organizations to promote and protect the best interests of warm air heating.
12. Forty per cent of the nation's building is residential.

If time permitted it would be quite interesting to analyze this enumeration and quite easy to extend it, but the list in itself is surely enough to convince you that 1924 is susceptible of big things for warm

air heating and not difficult to use to advantage.

It might be stated that while the Standard Code is simple, tables are already appearing that will make it even easier and quicker for the installer to use.

Is it not fine and fortunate to have a condition which may be worked out to the good of the individual manufacturer, to the good of the dealer and to the good of the consumer, to the lasting good of the whole industry and to every consumer? It means a real success in 1924 is possible and it will mean a profit which is so necessary and deserved, although you know the greatest pleasure from your business does not come from the financial reward, but from the satisfaction secured by doing things right and well. It is that which puts joy in the heart of any man.

Is not "Our Opportunity" at hand?

Harrison Says Rose Should Raise Warm Air Opening Above the Floor.

Here is another solution to the problem submitted by C. B. Rose, ———, Missouri, in our issue of December 1.

E. S. Harrison, ———, Michigan, has sent in the following recommendation to Mr. Rose:

TO AMERICAN ARTISAN:

I have recently met with several cases of trouble similar to that of Mr. Rose (page 19, December 1 issue), and may be able to offer suggestions which will help him.

Without a plan of the house, it is impossible to tell the exact cause of the trouble, but it is usually safe to say that if a pipe will not carry warm air, it is carrying cold air. The flame of a match, held to one side of the register, near the floor, will soon show if cold air is traveling in that direction. There are several ways of correcting this. The easiest, and least certain, is to "bleed" the pipe by connecting a smaller pipe (about 3-inch) to the bottom of it, carrying it to the bot-

tom of the furnace or to the most convenient cold air pipe.

In the case of the pipeless, a hole between the two casings would be the most convenient. Where the flow of cold air is not too strong, this will give good results.

If Mr. Rose will remove his register and attach a length of 8-inch pipe to the collar of the register box, thus raising the warm air opening above the floor, he will probably get results, and can then effect a permanent cure by installing a wall register instead of the floor register. I am assuming that Mr. Rose has provided some other exit for the cold air and that it is taking the easiest way instead.

E. S. HARRISON.

———, Michigan, December 4, 1923.

Your Net Profits Depend on Turnover.

Turnover is the important word in a business man's vocabulary. It is sought and it is always found in successful stores. Turnover represents sales, and sales mean profits, and profits insure you an income. It is easy to determine whether your turnover is speedy enough and it is important that you find out at once. Unless your gross business for the year is more than twice your capital stock, then your turnover is falling far short of the mark.

Many merchants contend that they would rather make a larger profit on one article than a smaller profit on a number of articles. The fallacy of such an argument is best illustrated by the phenomenal success of stores with records for frequent turnovers. Their profits on some articles are small, but the great volume of sales more than makes up for the meagre returns on individual sales.

Many merchants say, "How can I increase my turnover?" The rules are simple and can be summed up by: (1) Handle nationally advertised goods. (2) Use your local newspaper constantly. (3) Utilize your windows and floor display space. (4) Do not overstock. (5) Concentrate on fewer lines. (6) Demonstrate.

Constructing Ornamental Stack Head Not Difficult Once Proper Procedure Is Determined and Employed.

Kothe Says Ornamental Stacks Are Made in Four or Five Designs, but Usual Practice Is to Leave Stack Plain Where Efficiency Is Not Impaired.

Written Especially for AMERICAN ARTISAN AND HARDWARE RECORD by O. W. KOTHE, Principal, St. Louis Technical Institute, St. Louis, Missouri.

SHEET metal workers who use up to No. 10 gauge iron are now and then called upon to make ornamental heads for stacks, such as are used for industrial plants, steamboats, and the like. They are just

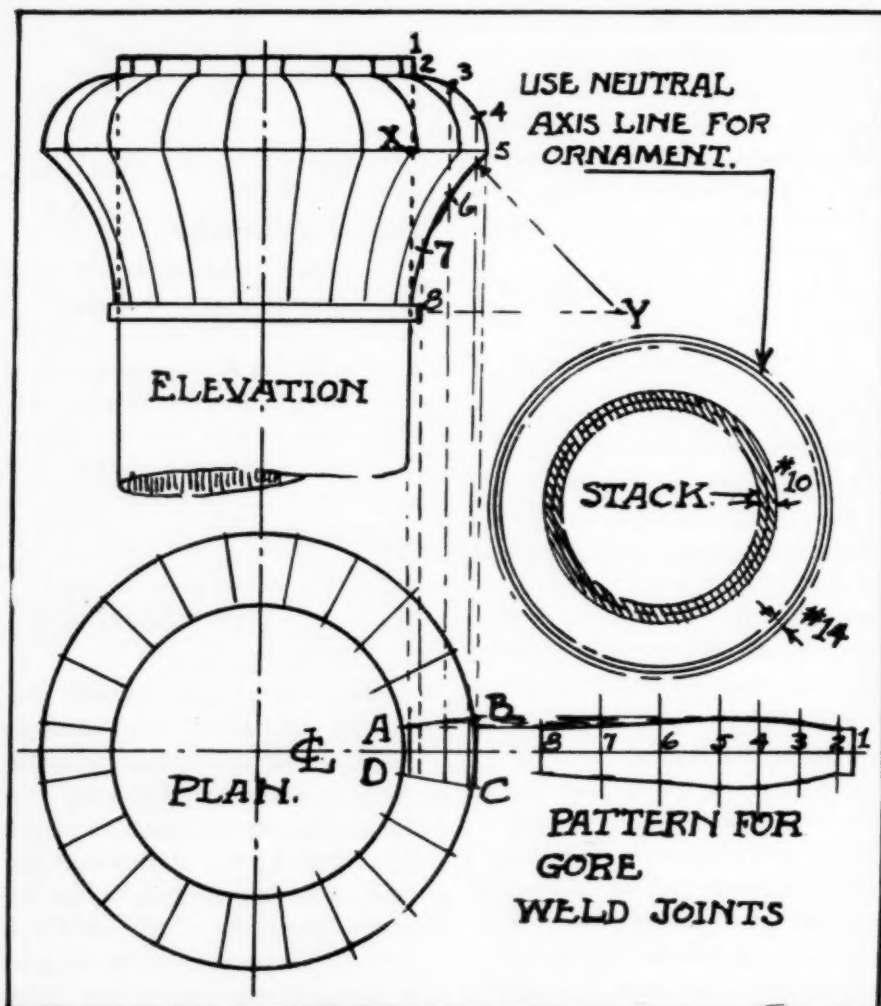
extra ornamental work that has no effect on the efficiency of the plant.

While inspecting our working drawing, we shall see that the same principle is applied as that used when laying out a ball by the gore

ter of the stack. This is used as a radius and is set as 2-X, with which the quarter circle 2-5 is described. The depth of X-8 is made about equal to one-half the diameter of stack, which gives a fair proportion of design, although this lower cove is more optional and can be lengthened if desired. The idea is to make a graceful turn not too sharp so that the shadows would be too deep and cause the stack to look shorter than it really is. Then the point Y is established by series of trials, so that the arc will intersect the two points 5 and 8.

The next step is to describe the plan to suit the several diameters and then decide on the number of gore pieces to be used in the head. In this case we use twenty gore pieces and that establishes miter lines as A-B and C-D. By dividing the elevation outline in equal parts, as 2 to 5 and 5 to 8, we drop lines from these points, crossing both miter lines in plan. Then we extend the center line of the plan and on it pick the girth, as from 1 to 8 in elevation, and set it as shown by projecting lines over to intersect those in stretchout of similar number, which gives us the points for tracing the new miter lines in the pattern. These lines are cut out true and uniform so that no hills or hollows are met with.

In general, these gores are then formed and the joints are welded, which is easier and much quicker than the old process of riveting. We should say that the elevation and plan are designed to the neutral axis line shown in diagram; the stack is treated on its outside line since the ornamental head must fit against it, while the ornament is treated on the neutral basis. Where it is the desire to have these ornamental



Working Drawing and Projections of Stack Ornament Show How Simple Is Problem of Constructing Ornament.

a false superstructure planted on the outside of the main stack and, therefore, do not need to be of so heavy a material as the main stack. These ornamental heads are made in four or five different designs, but, in general, most concerns leave the top of the stack plain, preferring not to spend the money for

method, or in laying out gores in cornice work, or any such fittings that have miters on two sides; which, in fact, is the same as laying out the middle gore pieces of an elbow. The projection of the furthest distance point, 5, is generally placed a distance away from X equal to one-quarter of the diame-

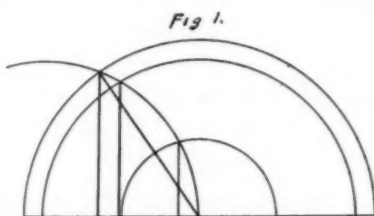
heads, have quite well formed curves to correspond to the circle and not the straight tangent lines; then each gore piece must be bumped out on the hammering block or stamped with the machine, in order to put the curvature in, and a perfect circle would result.

Harry Frye Says He Knows He Is Right, But He Wants Somebody to Prove It.

TO AMERICAN ARTISAN:

Referring to my letter to you in regard to the problem of the circles, you will note that my request was not for a method but for a proof of the method submitted.

Evidently Mr. Buckwalter, of Macon, Georgia, only gave my problem a passing glance and then cited me



Here Is a Chance for Your Geometrical Skill to Exercise Itself.

to the old Pythagorean rule with which I was thoroughly familiar when the problem was sent in for solution.

Figure 2 of the drawing herewith illustrates the Pythagorean triangle. Please note carefully that the triangle used in my method is not equal to nor similar to the Pythagorean triangle, but has for the hypotenuse a line of equal length which is the radius of the circle combining the areas of the other two circles. The problem to geometrically prove my method correct remains as yet unsolved.

HARRY FRYE.

_____, Tennessee, November 27, 1923.

J. A. Nelson, Incorporated, San Francisco, Plans 1-Story Plant Costing \$40,000.

J. A. Nelson, Incorporated, 517 Sixth Street, San Francisco, sheet metal works, plans a 1-story plant at Tenth and Howard Streets, to cost about \$40,000.

Want Ad Brought Radiator Repair Man to This Shop.

TO AMERICAN ARTISAN:

Please discontinue our advertisement for radiator repair man and sheet metal worker. We have received many applications for the place through AMERICAN ARTISAN.

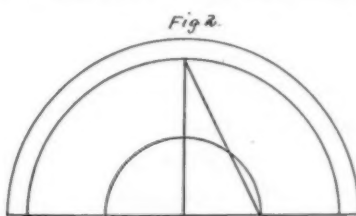
Yours truly,

C. H. GRAHAM,

Hamilton-Graham Company.
Oskaloosa, Iowa, November 28, 1923.

Secretary Mooney, Ohio, Submits Digest of Replies to September Sheet Metal Questionnaire.

The following is a letter from George F. Mooney, Secretary of the Sheet Metal Contractors' Asso-



ciation of Ohio, indicating the results obtained by the questionnaire sent out to secretaries of the locals in September by the Association.

TO AMERICAN ARTISAN:

We are enclosing a digest of the replies to our September questionnaire. We received about 25 per

No.	Mechanics per hr.	Helpers per hr.	Labor supply.	Number empl'd.
1.....	\$1.25	\$.31-82	Normal	600
2.....	.90	.50	Short	30
3.....	.75	.40	Normal	50
4.....	.70	.40-50	Normal	15
5.....	.50	.30	Short	12
6.....	.60-90	.40-50	Normal	200

cent response, which was pretty good for the first time.

We are sure the secretaries will realize that the state office must collect a large amount of data over a wide range of subjects and will, therefore, give us better support the next time.

It may seem to some that these things are unimportant, but the time may come when they might be of the greatest value to some group, and then the good results will be reflected clear down the line.

House bill No. 591 relating to workmen's compensation goes into effect January 1st. It provides that every person employing three or more workmen regularly in the same business, or in or about the same establishment under any contract of hire, expressed or implied, are subject to the act.

GEORGE F. MOONEY, Secretary.

S. K. Fesler Has Read 1,612 Issues of AMERICAN ARTISAN—Here's What He Says:

TO AMERICAN ARTISAN:

It is a pleasure to me to send my renewal for your valued paper. I regard it as the best paper I receive. I have gained more valuable information from the reading of AMERICAN ARTISAN than from any other I have read.

I have been a reader of AMERICAN ARTISAN since 1892 and expect to continue for at least two more years.

S. K. FESLER.

Palestine, Texas, November 28, 1923.

Does This Statement Apply to You?

A. D. White, Statistician for Swift & Company, recently expressed the following pungent estimate of the modern young man and woman:

	Hours per day.	Labor trouble.	Cond'n of business.
Closed shop	8	None	Fair
Closed shop	8	None	Good
Open shop	8-9½	None	Good
Open shop	10	None	Good
Open shop	10	None	Good
Open shop	9	None	Good

"Lack of sense of responsibility, unwillingness to work hard, lack of thoroughness, false notions about salary and promotions and lack of principle characterize 90 per cent of the young men and women who apply for positions today, and for this reason this large percentage fail to hold their first jobs."

Instead of being an evidence of permanence and reliability, an old weather-beaten sign is more likely to be an evidence of shiftlessness.

What the Repair Man Needs to Do About the Automobile Radiator.

*E. E. Zideck Explains What It Is,
What It Does, and How It Works.*

Written Especially for AMERICAN ARTISAN AND HARDWARE RECORD by
E. E. Zideck, Instructor in Charge of Sheet Metal Work and Allied
Trades at the Lincoln Institute, New York City.

E. E. ZIDECK, who will be remembered for his instructive articles on warm air furnace and radiator repair work, which have been published at frequent intervals by AMERICAN ARTISAN, reviews in the following some of the more important points pertaining to the repairing of automobile radiators:

The heavier parts of the radiator, such as tanks, inlets and outlets, the filler tube, bolt plates, shell holds, etc., etc., are held together by rivets or solder or both.

The radiator *core* is held together exclusively by solder.

A few makes of radiators, used principally on heavy cars and trucks, have the core soldered to special headsheets which are *bolted* to the tanks.

Questions.

1. What are the heavier parts of the radiator?
2. How is the upper tank joined?
3. How, the lower tank?
4. How are the inlet and outlet fastened to the tanks?
5. How is the filler tube fastened to the tank?
6. How are the bolt plates fastened to the tank?
7. How is the overflow pipe inserted and fastened?
8. How are shell holds fastened?
9. Are there rivets used in joining together the core?
10. By what means is the core held together?
11. How is the core fastened to the tanks?
12. If there are special headsheets, how are these fastened to the core?
13. How are special headsheets fastened to the tanks?
14. How are tubes fastened to the headsheets?
15. What is the proper way for

repairing a break or a leak in a radiator?

Where Leaks Occur Most Frequently.

The most frequent breaks and leaks in the tank of a radiator are about the hot water inlet and the cold water outlet, because these two parts are connected by *hose* to the motor and, while it is working, are constantly being shaken.

After these, the parts which break and leak most frequently are the bolt plates. These hold the bolts which fasten the radiator to the car frame and suffer equally from vibrations caused by the motor and by the jolting of the car.

Questions.

1. Where do breaks and leaks occur most frequently in the tanks of the radiator?
2. Why do bolt plates break away from the tank?
3. Why do inlet and outlet suffer from vibration?
4. Where, on a radiator, is the hot water inlet located and how is it connected to the motor?
5. Where, on the radiator, is the cold water outlet located and how is it connected to the motor?
6. On what parts of the radiator does the rough road which the car travels react most harmfully?
7. How does it react?
8. Where, on the radiator, are bolt plates located?
9. If the radiator leaks in the upper tank, where is the leak most likely to be?
10. If the radiator shows a leak at the lower tank, where will the leak most likely be found?
11. What are the proper means to repair leaky bolt plates?
12. Which way is the proper way to repair leaks around inlet and outlet?

Filler Tube and Overflow Pipe Leaks.

The filler tube of a radiator usually is riveted and soldered to the tank. If water should leak from under the shell without a leak in the core being visible, it might be taken for granted that the leak is around the filler tube.

The overflow pipe usually leaks around where it enters the tank. Should there be a loss of water from the tank without a leak being detectable, it might be taken for granted that the leak is in the overflow pipe, *inside* the tank.

A leak in the overflow pipe *outside* the tank will not matter, because no water but that which overflows can leak out through it.

An *inside* leak in the overflow pipe, however, will empty the tank rapidly.

Questions.

1. If water comes from under the shell and no leak in the core is detectable, where is the leak most likely to be found?
2. How is the filler tube fastened to the tank?
3. If it leaks, what is the proper way to repair the leak?
4. Where is the overflow pipe most likely to be found leaking?
5. Is it the overflow pipe or is it the tank that is leaking at the entrance of the former into the latter?
6. What would be the proper way to repair the leak around the entrance of the overflow pipe into the tank?
7. Should the radiator lose water without a leak being visible, what might be the cause?
8. Why is a leaky overflow pipe, unless it leaks inside the tank, of no harm?

Tank Leaks.

The tanks of the radiator are either stamped out of a solid piece of metal or assembled from more pieces and joined by solder.

If *stamped*, the tanks will break and leak frequently, because either the metal was defective in the first place and not fit for stamping, or it may have been drawn out too much and thus thinned by the stamping process.

In many cases the metal of the tanks is found broken in a way indicating that it was not soft enough when stamped and hardened under the process so as to splinter apart.

In these cases the repair should consist of covering over the defective parts with new metal and soldering the patch tight.

Questions.

1. Of what nature are breaks and leaks in the metal of the stamped-out tank?

2. Will the metal around such breaks and leaks be good or defective?

3. With what suspicion would you regard a break in the metal of a stamped tank?

4. Is it of any importance to know the nature of a break in a stamped tank?

5. Would simple soldering do to repair such a break?

6. Why is it important to know such small details as the nature of a break in a stamped tank?

7. Why is a repair made?

Tank Joint Leaks.

The tanks of a radiator which are assembled from parts and joined by either seam and solder or solder solely, will break apart in their joints.

Leaks in tanks assembled from parts will be found in *seams*, *laps* and soldered *spots*.

Many times it is a single rivet which has loosened its hold in the solder tightening it, which will prove to have occasioned all the loss of water from the radiator of which the owner may complain.

Questions.

1. What difference is there between a radiator tank stamped out and one assembled?

2. Where will the breaks and leaks occur in an assembled tank?

3. What good does it do to know in advance where to look for a leak?

4. What good does it do to know the nature of a break and leak?

5. Is there any difference between work done blindly and that with a comprehension of all the factors involved?

6. What help is rendered to the repairer by the knowledge which he

has of the nature of breaks and leaks he is to repair?

7. Of what help is it to him to know in advance where to look for breaks and leaks?

8. Is it of any importance to him if he knows how the leaky part is constructed and how it may have broken apart from its former hold?

Review.

It is of great help to the radiator repairer to know the places in which a radiator is liable to break apart and leak. Equally important is it that he should know the nature of the parts, fastenings, etc., etc., in which breaks and leaks are most likely to occur.

The student will do well to memorize answers to the following questions:

a. Which parts of the radiator are the easiest to break and cause leaks? Why?

b. Is the way the broken and leaky parts were fastened originally, the way to repair them? Why?

c. In what way is a knowledge of the parts, their nature and their joining, helpful to one who desires to effect a good repair?

d. If there was a defect either in material or construction when the radiator was made, would the remedy of that defect constitute a good repair?

e. Are there defects in either material or construction of new radiators?

f. Could you detect these defects and do away with them without *knowing* the radiator, its parts and their construction and joining?

g. What does one expect that a repairer will do to a part giving frequent trouble?

h. What knowledge enables the repairer to detect faults in a radiator, its parts and their joining, and to remedy them without doing injury to the radiator?

Too many foremen feel that firing a man is the easiest way out of a difficulty. It is the most natural way, but except in extreme cases, it is the least acceptable. Any foreman can fire men, but it takes a mighty good man to control them.

Friedley-Voshardt, Chicago, Developes New Golfers' Copper Weather Vane.

The Friedley-Voshardt Company, 733 South Halsted Street, Chicago, manufacturers of all kinds of metal art work, have developed a new copper ball-bearing weather vane for use on golf grounds or club houses to enable the golfer to tell



Showing Copper Weather Vane.

from what direction the wind is blowing.

The vane, as shown in the illustration herewith, the company says, is reinforced with heavy galvanized iron pipe and is attractive in appearance.

For further information write the Friedley-Voshardt Company.

Chart your sales by groups, and follow the upward curve of the winners.

Secretary Mooney Sends Message to Ohio Sheet Metal Contractors—Non Members.

Plain Facts and Sound Arguments Are Cited for Need of Organization Work and Support.

WHILE the letter in the following is addressed by Secretary George F. Mooney to Ohio sheet metal men particularly, the statements in the letter apply with equal force to sheet metal contractors in Illinois, Iowa, Missouri, or any other state except possibly in the matter of membership dues:

DEAR FRIEND:

We are herewith extending to you a cordial and urgent invitation to affiliate yourself and your business with the other sheet metal contractors of the state and nation through the state association. We are not asking you to do something for some other person, but to join with others for your own advantage.

The time has arrived in our national progress which demands a united industry in order to meet and solve the tremendous problems that are arising and will continue to arise through the lifetime of every sheet metal contractor now living. These problems range all the way from the various processes of your own business to every act of the Federal Congress and no man can dodge his responsibilities without paying the penalty.

The Sheet Metal Contractors are already receiving invaluable benefits from the mass action of those branches of industry that are already organized; however, full fruition can not be had until the sheet metal contractor and all other branches of industry are so organized that they can unite their economic resources and influence with the whole.

Your standing in the ranks shoulder to shoulder with your fellow tradesmen and the contribution of your annual dues is important but the real essential thing is for you to contribute your experience, integrity and active cooperation to organized industry in order to help eliminate waste, improve efficiency

of management, increase production and oppose destructive anti-industrial legislation. This is the duty of organized industry and upon which your future tranquility depends.

If there is no association in your city you may join the State Association for a fee of five dollars, three dollars of which is the per capita tax to the National Association and entitles you to the official organ "Warm Air Heating & Sheet Metal Journal" and two dollars goes to the State Association.

We are enclosing an application blank and a copy of the Constitution and By-Laws of the State Association.

May we not receive your favorable consideration by return mail?

Very sincerely yours,

Shee Metal Contractors' Association of Ohio,

GEORGE F. MOONEY,
Secretary.

P. S. We will cheerfully give you all the personal service we are able to as often as you ask it especially in reference to State Departments, legislation and legal problems pertaining to the industry.

More Confidence Needed in Business.

Business needs confidence and a lot of it. Now we are in the business of reconstruction, the period of building up the great structure of stability, confidence. The false and unstable has no longer a place. Business must be done on a sound, truthful and honest basis. This is evident at every hand. It is gratifying to know that real men are forging ahead, laying the foundation of better business for better results.

If you feel an inclination to be ready with a sharp come-back for customers who are not courteous to you, just remember that there is no money in a sharp retort.

Notes and Queries

Bright Charcoal Dairy Plates.

From Tibbetts and Company, Highland, Illinois.

Please advise where we can buy 20-gauge bright charcoal dairy plates, 36x96.

Ans.—Merchant and Evans Company, 347 North Sheldon Street, Chicago, Illinois.

"Knox Everlasting" Cast Iron Smoke Pipe.

From H. E. Ashelby, 3737 Ellis Avenue, Chicago, Illinois.

Where can I buy "Knox Everlasting" cast iron smoke pipe?

Ans.—It is made by the Waterloo Register Company, Waterloo, Iowa, and is carried in stock by The Manny Heating Supply Company, 131 West Lake Street, Chicago, Illinois.

Successors to T. M. Roberts Supply Company.

From Stove Dealers Supply Company, 310 Chestnut Street, Milwaukee, Wisconsin.

Can you tell us who the successors to the T. M. Roberts Supply Company of Minneapolis are?

Ans.—Roberts - Hamilton Company, 413 South 4th Street, Minneapolis, Minnesota.

4 and 6X Tin.

From L. L. Hoffman Sheet Metal Contracting Company, Wausau, Wisconsin.

Please tell me where I can buy 4 and 6X tin in sheets about 4x9 feet.

Ans.—John J. Croke Company, 1269 South Campbell Avenue, Chicago, Illinois.

Brick Making Machinery.

From Fair Avenue Tin Shop, 251 Fair Avenue, Benton Harbor, Michigan.

Will you kindly advise us who makes brick-making machinery for making clay bricks?

Ans.—Chicago Brick Machinery Company, 2825 West Harrison Street, Chicago, Illinois, and International Clay Machinery Company, Dayton, Ohio.

Repairs for "Conviction" School Heater.

From J. Albert Murphy, Flat River, Missouri.

Can you tell me where to secure repairs for the Conviction school heater?

Ans.—Northwestern Stove Repair Company, 20 West Lake Street, Chicago, Illinois.

Santa Claus and His Toy-Filled Wall Board Sleigh Make Excellent Christmas Window Display.

Skates, Hockey Sticks, Sleds and Numerous Other Sporting Goods and Toys Featured by Indianola Hardware Company.

WINDOW display designing is an art which has come to be as important in the merchandising of products as newspaper and similar forms of advertising. If advertising by word of mouth and by the use of printer's ink is important—and no one will deny that it is—how much more important is the actual display of the goods where they can be subjected to close observation?

The window display keeps pedestrians informed on what is "being done," so to speak.

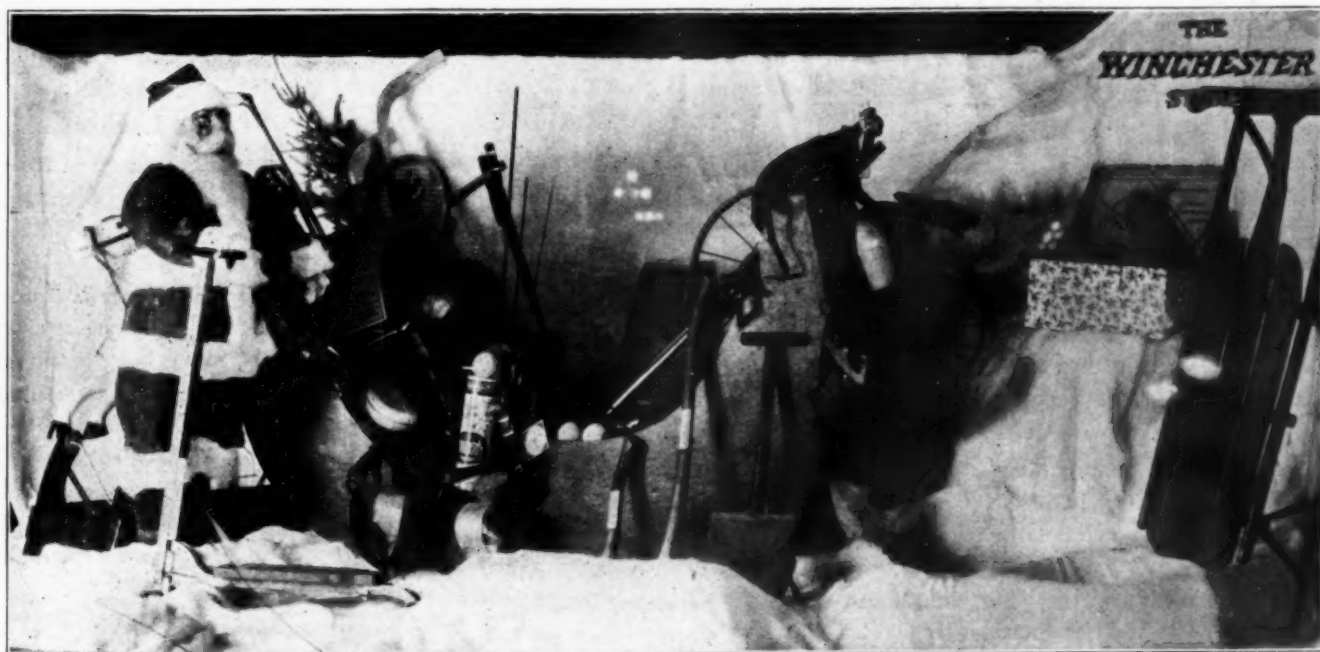
agination. Those of the latter class are particularly susceptible to the power of window displays, because they are not immune from the benevolent spirit pervading the pre-holiday atmosphere, but lacking imagination, they are at a loss to know in what way best to express their feelings; consequently the usefulness of the well designed window display is immediately apparent. Those in the former class must also be catered to.

The accompanying window display was arranged by the Indianola

"The sled is made by nailing wall board to a wooden frame, thus making it strong enough to support its load of playthings for boys and girls."

Let AMERICAN ARTISAN Window Display Competition Test Your Ability as a Window Trimmer.

A friend of mine whose productive ability is such that it permits him to satisfy just about all of his consumptive wants was desirous of purchasing a certain article in the



Indianola Hardware Company, Indianola, Iowa, Uses Winter Sporting Goods for Christmas Window Display.

In these pre-festival days particular interest and care should be exercised in creating attractive and suggestive window displays. If there is ever a time in the year when folks are in the spirit of buying it is at Christmas, and if your store is desirous of rendering a service to its patrons, it has a splendid opportunity at this time to do so.

People can be divided into two classes; namely, those who are discriminating and those who lack im-

Hardware Company, Indianola, Iowa.

They make the following comment:

"In this window we have Santa Claus loading his sled in the far North. The background is made up of irregular objects covered with cotton and sprinkled with artificial snow. Santa is made over an underwear form about three feet high; his suit is made of red cloth trimmed with cotton.

sporting goods line. I quite casually suggested the name of B's store as a likely place, but my friend demurred and said: "Oh, no, I wouldn't have any of their goods; their advertising and window displays make me tired, but A has some stuff that strikes my eye."

Now, my friend had no particular grievance against the goods that B handled, but he had been prejudiced against them by the advertising and window displays of the

store. For the same reason he was favorably impressed by the goods in A's store. The window display and advertising of A's store had been designed to create a favorable impression, and they succeeded.

AMERICAN ARTISAN AND HARDWARE RECORD is now conducting a window display competition to stimulate interest in this phase of the retail selling.

Although the contest does not close until January 12, 1924, we have already received for entry numerous photographs of window displays made by window trimmers located in various parts of the country.

We look to you retailers to show the proper spirit and interest in forwarding this work, which is of the most vital importance to yourselves, by submitting at least one photograph for entry.

Every photograph has an equal chance of winning one of the four prizes offered.

It's up to you to make the trial.

Rules Governing Contest

The photograph, together with descriptions of how the window displays were arranged and the materials used may be sent by mail or express, charges prepaid, and must reach this office not later than January 12, 1924.

Each photograph and description must be signed by a fictitious name or device and the same name or device must be placed within a sealed envelope containing the real name and address of the contestant. This sealed envelope is to be enclosed with the photograph. Contestants may enter as many window displays as they desire.

AMERICAN ARTISAN AND HARDWARE RECORD reserves the right to publish all photographs and descriptions submitted in this competition.

A competition committee of three will be appointed, one of whom will be an expert window dresser and one an experienced hardware man. This committee will pass upon the merits of all photographs and descriptions received, without knowing the names or addresses of the

senders, and will decide the winners of the contest.

Major Foote Desires Suggestions on Lines Lending Themselves to Simplification.

The following communication has been received from F. D. Mitchell, Secretary of the American Hardware Manufacturers' Association, relative to Simplification:

Major A. E. Foote, of the Division of Simplified Practice, Department of Commerce, Washington, D. C., has asked us to secure from our members suggestions as to the line that each makes that lends itself to Simplification.

In addition to this information, will you kindly advise us if you will attend a meeting of the makers of that line, provided it is the wish of the majority that such meeting be held?

F. D. MITCHELL,
Secretary-Treasurer.

Shall Transportation Act Receive Further Trial Unamended?—Mitchell.

Relative to the question of revising the Transportation Act, F. D. Mitchell, Secretary-Treasurer, American Hardware Manufacturers' Association, has issued a call for members to express their opinions on whether or not they favor a further trial of the transportation act unamended.

Mr. Mitchell's letter explains that at present the public seems adequately protected; rates are either controlled or fixed by the Government; it is the sole judge as to a fair return upon investment and as to the value of railway properties. It has the decision as to whether the railroads are managed honestly, efficiently and economically and whether the expenditures for maintenance-of-way are reasonable; it advises as to what stocks or bonds shall be issued and upon what terms.

He says the government has so far invaded the field of railway management as to approach actual ownership without having paid pur-

chase price; without assuming responsibilities of management, which is obviously unfair.

The question is whether or not to continue a trial of the transportation act unamended. The continual tinkering with the transportation act seriously hampers the railroads in securing capital and those who have recently resumed investment in railway securities may become seriously apprehensive if any amendments whatever are made.

If railways cannot continue to obtain capital they cannot make as they have for two years the large purchases that are needed, in fact, it would seem to be a risk to general prosperity.

A prompt expression of your views on this subject will facilitate the work of getting the petition before the proper authorities.

Industrial Supply Will Be St. Louis Distributing Agent for E. C. Atkins & Company.

Notice has been received from G. W. Gladding, 6010 Waterman Avenue, St. Louis, Missouri, Manufacturers' Agent representing E. C. Atkins & Company, Indianapolis, Indiana, that the Industrial Supply Company, 311 North Second Street, St. Louis, will be the distributing agents of the Atkins Company in St. Louis, while G. W. Gladding will represent the factory in direct business, looking after the jobbing trade. The company deals in circular and band saws.

Five Tragedies That Were Real Tragedies.

A man struck a match to see if the gasoline tank in his automobile was empty. It wasn't.

A man patted a strange bulldog on the head to see if the "critter" was affectionate. It wasn't.

A man speeded up to see if he could beat the train to the crossing. He couldn't.

A man touched a trolley wire to see if it was charged. It was.

A man cut out his advertising to see if he could save money. He didn't. Anon.

Groff Presents Enameled Ware Kitchen Utensils as Utility Christmas Gift Suggestions.

Tells Housewares Dealer How He Can Make Valuable and Practical Christmas Display at Small Expense.

THE following article contains practical suggestions on Christmas display work and is written by Alden D. Groff, Service Department of the Associated Manufacturers of Enameled Ware, 46 Cedar Street, New York:

No, there is no law which re-

And in a way it's all the housewares dealer's fault.

Every man who sells housewares should at the season of good cheer and good fellowship make it his mission in life to make his customers' friends happy—by making sure that his customers give their friends use-

to get a good "chunk" of the business that goes to the candy store, the florist, the perfume counter and the other places that sell things that don't last.

It is not so many years ago that a few dealers woke up to the fact that they were carrying on their shelves things that would make ideal Christmas gifts. Manufacturers of many hardware and houseware lines began to advertise their Christmas possibilities and some designed special packages. So that now almost everything from silverware to spark



Enameled Ware Also Lends Itself Well to the Making of Attractive Christmas Window Displays, as Shown by Display Made by Alden D. Groff, Associated Manufacturers of Enameled Ware, New York City.

quires Christmas gifts to be useless. Judging from the kind of presents some people give, you would think there was such a law. "I suppose I shall have to have this terrible thing around the house when Mrs. So-and-So comes because she gave it to me for Christmas"—you hear this in many homes on Christmas day.

ful things for Christmas. The hardware store and housefurnishings departments are in a strong position to benefit from any campaign for a utility Christmas—because these stores carry fewer useless "doo-dabs" and fancy "whatsits" than any other kind of store. Every store selling housewares should do its best

plugs finds a place in Christmas stockings.

And yet there are still too many dealers who have not seen the flourishing "holly and mistletoe business" in kitchen utensils. There are really not many useful Christmas presents—at moderate prices—which have stronger claims than enameled ware.

After all, what qualities ought a good Christmas present possess? It ought to look good—and judging by the way enameled ware is increasingly popular with those women who want their kitchens to look “just so,” enameled ware certainly fills that requirement. Enameled ware looks clean and stays clean. What would be more thoughtful than giving a friend a piece of enameled ware to match her kitchen set?

A Christmas present ought to be a constant reminder of the giver. Cooking utensils are probably more used than any other things in the house. A woman who uses a nice, clean, handy and troubleless piece of enameled ware day in and day out will hardly be likely to forget the person who gave it to her. And a good enameled ware utensil will outlast many Christmases.

Merely calling a thing a Christmas present does not make it so. Women must be taught through advertising and still more advertising that housewares will solve many of their Christmas gift problems. Advertise in the newspapers, advertise through circulars, play them up on the counters and in the windows. Don't talk in generalities in your ads—give practical suggestions—they will be flashes of inspiration to women who have been puzzling over the question, “What shall I give?” A gift for mother; a gift for married sister; a gift for a newly married girl friend (who may have a kitchen full of wedding presents and yet will not find a new piece of enameled ware superfluous); a gift for every woman in your customer's bridge club or church society—a gift for every woman with a kitchen can be found on the housewares shelves. Tell your customers about them.

Make it easy to buy and give housewares for Christmas presents—provide a delivery service—have plenty of boxes and bright paper and gay string, tape or ribbon. Have gift tags or cards ready for your customers—print on them such little sentiments as “May you have thou-

sands of pleasant meals from this piece of enameled ware.”

Don't wait for Christmas to come on you unexpectedly—lay your plans well ahead. Send out circulars to all your customers and get their Christmas trade before the other stores get it. Go carefully over your stock and make out an attractive list of goods suitable for Christmas presents.

And then there are many specialties which are just made for Christmas and should be featured to the limit. There is a carving set in cutlery; a selection of silverware for the Christmas feast, and in enameled ware there is the roaster and the preserving kettle for the cranberry sauce. The combination of roaster and preserving kettle can be

featured just as successfully at Christmas as at Thanksgiving.

And no wise housewares dealer will let himself forget that eleven months of the year he has only the other housewares stores to compete with—but in December he has almost every other store in town as competitor. But the one who anxiously wants Christmas business and is willing to go after it, will find that it more than pays.

The Christmas spirit should almost sing out of your windows. Use plenty of bright green and red—Christmas plants and crepe paper. The accompanying illustration shows a simple but real “Christmas” window—gay boxes as pedestals for pots and pans—all around a Christmas tree.

Decimal Method of Pricing and Packing Eventually Will Be Adopted Thinks Waldvogel.

Cost of Making the Change Discussed at Some Length at Atlantic City Convention.

THE decimal pricing system has been much discussed of late, and E. C. Waldvogel, Vice-President of the Yale & Towne Manufacturing Company, Stamford, Connecticut, in the following somewhat brief but instructive address delivered at the convention of American Hardware Manufacturers' Association, Atlantic City, October 18, 1923, gives his views on the subject:

The “Decimal” Method of Pricing and Packing:

There has been so much said about the advantages to be gained from the decimal system of pricing and packing that it is difficult to say anything new about it. In discussing the subject with others, one concludes that there are many reasons why it should be adopted, and only a few reasons against its use. In the long run it will make money and simplify work for those who adopt it, with nothing to lose.

The system is gaining favor and those who are not ready to take the step to adopt it feel that it cannot work well unless it is universally adopted to avoid confusion. The confusion is the main objection of the jobbers and it is well grounded. It must be conceded that the jobber, with his many lines, is exposed to errors and confusion if one only of several similar lines he stocks is on the decimal system. The jobbers, however, generally favor the system, and are willing to accept the confusion for a comparatively short time,

and the work caused by the switch from one method to the other.

Analyzing Subject.

There are many lines and items among the thousands covered by the industry as a whole which have been priced and packed by the decimal or unit system for many years. They are, of course, the larger and higher-priced items, those which, because of their bulk, or being generally sold one at a time are packed one in a box. It is needless to name these lines, as all hardware men know them and know from experience what a convenience the decimal or unit method of pricing and packing is in the buying, stocking, selling, billing and inventorying of them.

If some one should recommend putting these lines and items, which have been sold and packed on the decimal or unit system for years, back on the dozen plan be raised. For example, door closers again, what a storm of objection would method for many years. No one has have been priced and packed by the unit objected to it, but everybody would object if the manufacturers of them now changed to pricing them by the dozen.

The ultimate consumer invariably asks the price of one. If this is the basis on which the retailer's customer wants to buy, it appears as though the retailer should buy on that basis, and naturally the jobber and the manufacturer should price them that way.

Cost of Making Change Will Be Considerable.

It has been mentioned that the cost to a manufacturer of changing from the old system to the new or decimal method is large. It must be admitted that it

costs something to make the change and that the cost to some manufacturers would be greater than to others. If the change required the special printing of a new catalog, the cost would be, of course, large for some manufacturers, who have long lines of products. If the change is made at the time a new catalog is issued, the cost of the catalog will not be increased. The cost will, then, in the case of most companies, occur in the changes of the sizes of paper boxes, wooden shipping cases and the changes necessary in the labels.

It has been suggested that the decimal method of pricing could be adopted and the packing on the dozen basis continued. That would be a compromise, but it would fail in accomplishing the desired result. The jobbers generally would continue to sell on the dozen basis, to conform their selling prices to the packing, and the retailer would not be reached by that plan, nor would the jobber be benefited in his own billing.

It is my belief that the hardware industry will eventually adopt the decimal or unit method of pricing and packing, and, if so, why not now?

What Is the Dominant Idea About Your Store?

Many merchants pay thousands of dollars a year for newspaper space, yet rarely put into that space a line or a word giving anyone a good reason for buying from them instead of from Smith or Jones. The simple mind is easiest sold on some single dominating idea. It cannot follow an argument that is complex or involved, especially when that idea is presented in a newspaper advertisement.

Coming Conventions

Meeting to Organize Kentucky Sheet Metal Contractors' Association, Tuesday, December 11, 1923, at Hotel Tyler, Louisville.

Western Retail Implement and Hardware Association, Missouri Theater Building, Kansas City, January 15, 16, 17, 1924. H. J. Hodge, Secretary-Treasurer, Abilene, Kansas.

The West Virginia Retail Hardware Association Convention and Exhibit, Huntington, West Virginia, January 15 to 18, 1924. James B. Carson, Secretary-Treasurer, 1001 Schwind Building, Dayton, Ohio.

Mountain States Hardware and Implement Association Convention, City Auditorium, Denver, Colorado, January 22-24, 1924. W. W. McAlister, Secretary-Treasurer, Boulder, Colorado.

Kentucky Hardware and Implement Association, Louisville, January 22-25, 1924. J. M. Stone, Secretary-Treasurer, 202 Republic Building, Louisville.

Indiana Retail Hardware Association, Convention and Exhibition, Cadle Tabernacle, January 29, 30, 31, February 1, 1924. G. F. Sheely, Secretary, Argos.

Illinois Retail Hardware Association,

Hotel Sherman, Chicago, Illinois, February, 1924. Leon D. Nish, Secretary-Treasurer, Elgin, Illinois.

Nebraska Retail Hardware Association, Lincoln, Nebraska, February 5 to 8, 1924. George H. Dietz, Lincoln Nebraska, Secretary-Treasurer.

Wisconsin Retail Hardware Association Convention and Exhibition, Milwaukee Auditorium, February 6, 7, 8, 1924. George W. Kornely, Manager of Exhibits, 1476 Green Bay Avenue, Milwaukee. P. J. Jacobs, Secretary-Treasurer, Stevens Point.

Michigan Retail Hardware Convention and Exhibition, Grand Rapids, February 12, 13, 14, 1924. Karl S. Judson, Exhibit Manager, 248 Morris Avenue, Grand Rapids. A. J. Scott, Secretary, Marine City, Michigan.

Iowa Retail Hardware Association, Des Moines, Iowa, February 12, 13, 14 and 15, 1924. A. R. Sale, Secretary-Treasurer, Mason City, Iowa.

The Pennsylvania and Atlantic Seaboard Hardware Association, Incorporated, Convention and Exhibition at the Philadelphia Commercial Museum, Philadelphia, Pennsylvania, February 12, 13, 14 and 15, 1924. Sharon E. Jones, Secretary-Treasurer, Wesley Building, Philadelphia.

Ohio Hardware Association, Convention and Exhibition, Cincinnati, Ohio, February 19, 20, 21 and 22, 1924. James B. Carson, Secretary, 1001 Schwind Building, Dayton, Ohio.

New York Retail Hardware Association Convention and Exhibition, February 19, 20, 21, 22, 1924. Headquarters, McAlpin Hotel, and exhibition at Seventy-first Regiment Armory. John B. Foley, Secretary, 412-413 City Bank Building, Syracuse, New York.

New England Hardware Dealers' Association Convention and Exhibition, Mechanics' Building, Boston, February 20, 21, 22, 1924. George A. Field, Secretary, 10 High Street, Boston, Massachusetts.

North Dakota Retail Hardware Association Convention and Exhibition, Municipal Auditorium, Fargo, February 20, 21, 22, 1924. C. N. Barnes, Secretary, Grand Forks.

Michigan Sheet Metal and Roofing Contractors' Association, February 25 to 28, 1924, Hotel Kerns, Lansing. T. E. Eiderle, Secretary, 1121 Franklin Street, S. E., Grand Rapids, Michigan.

Missouri Retail Hardware Association Convention and Exhibition, Marquette Hotel, St. Louis, February 26, 27 and 28, 1924. F. X. Becherer, Secretary, 5106 North Broadway, St. Louis.

Minnesota Retail Hardware Association Convention and Exposition, St. Paul Auditorium, February 26, 27, 28, 29, 1924. C. H. Casey, Secretary, Jordan, Minnesota.

South Dakota Retail Hardware Association and Exposition, Coliseum Building, Sioux Falls, March 4, 5, 6, 7, 1924. C. H. Casey, Secretary, Jordan, Minnesota.

California Retail Hardware Implement Association Convention and Exhibition, Civic Auditorium, San Francisco, March 18, 19, 20, 21, 22, 1924. LeRoy Smith, Treasurer, 112 Market Street, San Francisco.

Southeastern Retail Hardware and Implement Association, composed of Alabama, Florida, Georgia and Tennessee, Convention and Exhibition, Atlanta, Georgia, May 27, 28, 29, 1924. Walter Harlan, Secretary, 701 Grand Theater Building, Atlanta.

Hardware Association of the Carolinas Convention, Wrightsville Beach, North Carolina, June 17, 18, 19, 1924. T. W. Dixon, Secretary-Treasurer, 717-718 Commercial Bank Building, Charlotte, North Carolina.

Retail Hardware Doings

Alabama.

J. P. Wood and Sons have sold their hardware business located on the west side of Court Square, Troy, to Jim Tom Brantley and associates, and hereafter the firm will be known as the Troy Hardware Company.

California.

J. W. Wilkinson and Son, hardware merchants at Pomona, have purchased the one-story brick building at 354 West Second Street, now being occupied by the firm.

Louis M. Clickner of the Clickner Hardware Store, Colton, has purchased the M. S. Lewis, Jr., Hardware Store, which is situated on Base Line and E Street in San Bernardino.

Indiana.

Fire caused by the explosion of a furnace damaged the Chard and Thompsett Hardware Company Store, 509 South Michigan Street, South Bend, to the extent of about \$3,000.

Missouri.

A. A. McKee of Princeton has purchased the Pelikan hardware stock at administrator's sale.

The Goodman Hardware Company has moved its stock of goods to the building in Versailles vacated by William Duckworth.

Mr. S. E. Jerard has sold his hardware and implement business at Belton to A. F. Hundley.

Nebraska.

The stock of the Statton Hardware Store at Wahoo has been sold to the Lehmkuhl Hardware Company and to Toreel and Sons.

Oklahoma.

The interests of Rudolph Kobes in the Kobes and Monroe Hardware Company, Perry, has been purchased by Russell Dotts.

South Dakota.

A great deal has been completed whereby the Larson Hardware Company at Kimball has been sold to Fred R. Maresh and S. S. Wolf, and the firm will be known as Maresh and Wolf.

Texas.

Schad and Pulte, hardware and implement dealers at Galesville, are now comfortably established in a remodeled store that is modern in every respect.

Washington.

The Redmond Hardware Company at Redmond, under the management of E. A. Long, has opened for business in the old Theatre Building.

Wisconsin.

The Ott Hardware Company has purchased the Stone stock of hardware and the stocks of two other merchants at Merrimack, and has opened a hardware store there.

George Sweeney has opened a hardware store at 23 Washington Street, Petaluma.

Twelve Square Inches of Stove Advertising Appears Out of a Possible 4,200 Square Inches in One Paper.

*Hewitt Only Stove Merchant Who Saw Fit to Advertise, Although
Mail Order Houses Continue to Get Big Business by That Means.*

"THIS'LL surprise you," says the *Aurora Beacon News* in a recent editorial. "American women spend \$150,000,000 a year for hair nets. For scented soaps, the nation's bill is \$145,000,000 a year; for cosmetics, \$63,000,000; for chewing gum, \$100,000,000.

"America spends \$750,000,000 a year for toilet preparations, includ-

he has thoroughly and completely hypnotized himself in this belief.

In substantiating the above statement we have reproduced a stove advertisement which appeared in the *St. Petersburg, Florida, Times*, November 20, 1923. This stove ad, 3x4 inches, we regret to state, was the only advertisement of its kind that appeared in the paper named,

tomers will not read advertisements in one breath, and then turns right around in the next breath and deplores the fact that the mail order houses are running circles around him in the way of selling stoves, about which he can do nothing.

In reality he can do something about it, but he won't. He has everything in his favor to combat the mail order house; he can beat them at their own game by using the same kind of tactics, because he is right on the ground, while his competitor is fighting at long distance; the stove merchant mingles with his prospective customers and has the advantage of being able to influence them with his personality; whereas, the mail order catalogue is at best a cold, impersonal and inanimate object.

Other businesses grow from 1-horse to 2-horse and from then on to "20-mule teams," and gradually spread their tentacles throughout the entire realm and let them drip over on the outside with the aid of consistent and persistent advertising, and the men at the head of these vast machines are talking all the time to the same people whom the stove merchant meets every Sunday at church and whom he could talk to about his business six nights a week through the newspaper if he but would.

Let's get busy and turn some of this cosmetic money into stove money!



Stoves From \$25 Up

When you are in the market get one that will not rust, a

CLARK JEWEL

The inside of oven is where the rust gives the most trouble. Ours are enameled inside as well as out. Our stoves also have the Lorain Oven Heat Regulator.

C. W. HEWITT
The Plumber Who Satisfies

707 Central Phone 244

Lone Stove Ad Appears in St. Petersburg, Florida, Times, Competing with Six Pages of Real Estate Ads.

ing talcum powder, cold cream, rouge, lipsticks.

"All of which shows many things, chief of which is the power of advertising, the mighty force that has done more than any other to make our standard of living the highest in the world."

Here is food for thought for stove merchants.

Ask the average stove merchant his opinion of advertising and he will probably tell you that it is all right for the other fellow, but the people to whom he caters are peculiar; they don't read advertisements and, therefore, advertising would not do his business any good;

although there were fourteen pages of advertising, six of which were real estate advertisements.

There may possibly be some excuse for this deplorable neglect to grasp opportunity by the forelock in a southern clime, but unfortunately, the stove merchant cannot fall back upon any such excuse, because the same condition exists with regard to newspapers throughout the entire country.

Every stove merchant believes that he has customers peculiar to his own community, when as a matter of fact, human nature is pretty much the same the world over.

The stove merchant says his cus-

We'd Hate to Pay Their Board Bill While They Wait.

My grandpa notes the world's worn
cogs,

And says we're going to the dogs;
His grand-dad, in his house of logs,
Swore things were going to the
dogs;

His dad among the Flemish bogs
Vowed things were going to the
dogs;

The caveman, in his queer skin togs,
Said things were going to the dogs;
But this is what I wish to state—
The dogs have had an awful wait.

—*New York Commercial.*

Attention in Business Centers Around New Congress —Developments Are Reassuring.

*In Non-Ferrous Metals Copper and Zinc Change Little
—Lead Is Strong, While Tin Fluctuates Rapidly.*

THE attention of business is centered upon the new congress this week. Developments have been reassuring. Conservative and economically sound views on the railroads and other matters affecting prosperity seem likely to prevail.

The effect of the President's address to Congress has sounded a new note of assurance of continued business prosperity.

The radical bloc is vociferous. However, it is improbable that its fiery declamations will be translated into legislation.

The bonus issue may entangle the administration's taxation relief plans. That may be laid to politics, according to the *Iron Trade Review*.

No more convincing evidence than this is needed to show that the country is not headed for a depression. Four years ago the index was slipping rapidly. Outputs not only have gained, but distribution records are climbing to new levels.

Wholesale trade in October, just reported by the Federal Reserve Board, gained 7 per cent over September. It was 12 per cent over October, 1922. Retail trade gained 6 per cent in a month and 13 per cent over one year ago.

Tin.

At the opening of the New York market December 5 several lots of Straits tin were sold at 46.75 cents for January delivery and November, December and January shipments from the Straits. At that time sterling exchange was easy at \$4.33 $\frac{3}{8}$ to \$4.33 $\frac{5}{8}$ for prompt cables, but later with an advance in sterling to \$4.35 $\frac{1}{2}$ to \$4.35 $\frac{3}{4}$ sellers lifted their prices to 47 cents.

At the afternoon call on the Metal Exchange 46.75 cents was bid and 47.25 cents was asked for all positions except December-January and January-February shipments from

the Straits, for which 46.85 cents was bid and 47 cents asked.

Copper.

Domestic consumers December 5 found no difficulty in buying Electrolytic at 13.12 $\frac{1}{2}$ cents delivered for shipment over the next few months, but there were few buyers for any important amounts. Some producers, however, are still asking 13.25 cents delivered, but are practically out of the market.

Neither first nor second hands were willing to sell Electrolytic under 13 cents f. a. s. New York for prompt, or under 13.12 $\frac{1}{2}$ cents f. a. s. for first quarter shipment.

Lead.

There were some large inquiries reported December 5 from consumers at New York, mostly for cable use, and the general consuming needs are unabated.

Dealers and operators are still strongly on the buying side of the market and bidding 6.95 cents, East St. Louis basis, for any position, prompt, December or January shipment, so that the East St. Louis level is about up to the New York price.

Producers are not over comfortable in respect to supplies for their commitments, and are obliged to be chary about taking on further business for this month's delivery.

Zinc.

The zinc market is again approaching the low point of the range of recent fluctuations from which it has repeatedly shown recovery, and the factors that have on each occasion attracted buying still remain unchanged. These are the stiff market for ore and the consequent high cost to the smelters. And secondly, the prospects of export which, though out of reach at present, seem likely to recur.

No great amount of selling pres-

sure is in evidence, but concessions might be obtained on prompt shipment.

Quotations for East St. Louis, 6.30 to 6.35 cents for prompt, December and January; February, 6.32 $\frac{1}{2}$ to 6.67 $\frac{1}{2}$ cents.

Solder.

Chicago warehouse prices on solder are as follows: Warranted, 50-50, \$30.50; Commercial, 45-55, \$29.75, and Plumbers', \$28.50, all per 100 pounds.

Wire and Nails.

Makers of wire and wire products at Chicago believe jobbers and other heavy buyers will come into the market in strong force late this month. Meanwhile they are able to maintain about 75 per cent operations on the small business that trickles in from week to week. Prices on all classifications are firm.

Sheets.

The leading independent maker of sheets at Chicago has taken an additional 1,500 tons of black sheets for Japanese reconstruction work, but plans to take no more such business, as it is booked up to February on the Japanese business it cares to place on its schedule. The placement of first quarter business is only fair and this maker is not trying to force users to buy, being content to let orders come along later. A small amount of sheet business is coming in steadily and the mills do not believe they will have to reduce operations this month. The market is firm at 3.00 cents, Pittsburgh, for blue annealed sheets, 3.85 cents for black and 5.00 cents for galvanized.

Tin Plate.

Because of a filled-up condition in connection with tin plate extending over first half, and since it has not opened its books for third quarter, one interest already is turning down

offers of tin plate tonnage. Numerous customers are endeavoring to place more orders for delivery before June 30, including some oil interests, and though under ordinary circumstances the tonnage involved would be exceedingly attractive.

Practically every mail brings heavy specifications and it is able to operate at around 94 per cent of capacity, as for two or three weeks past.

This gives the leading interest an average hot mill operation of 90 per cent, including sheets.

Independent producers likewise are enjoying better business in tin plate and the general tin mill average would be around that same figure.

The market price is unchanged at \$5.50 per base box of 100 pounds, Pittsburgh.

Material for the 20,000 railroad freight cars upon which local car building interests are figuring constitutes the prime factor in the plate market. It is estimated that about 65,000 tons of plates, shapes and bars will be required for the 6,500 freight cars the Southern Pacific Railroad is to buy, most of this being plates. A few small oil storage tanks are before tank interests. One interest, which foresaw a let-down in operations early in December, now believes it will be able to maintain operations unchanged because of the steady streaming in of small orders. The weakness in the plate price which has developed to the east of this market has not been in evidence here and 2.60 cents, Chicago, still governs.

Old Metals.

Wholesale quotations in the Chicago district, which should be considered as nominal, are as follows: Old steel axles, \$16.00 to \$16.50; old iron axles, \$24.00 to \$24.50; steel springs, \$18.50 to \$19.00; No. 1 wrought iron, \$12.00 to \$12.50; No. 1 cast, \$17.00 to \$17.50, all per net tons. Prices for non-ferrous metals are quoted as follows, per pounds: Light copper, 9½ cents; light brass, 6 cents; lead, 4¾ cents; zinc, 4 cents, and cast aluminum, 15 cents.

Pig Iron Production Reaches Year's Low Market in November; Stability Shown; Prices Acquiring Strength.

Heavy Buying at Chicago, Where December Iron Is \$23—Southern Market Improving, Quotations Firm at \$20 to \$21 for No. 2 Foundry.

FOR the first time in a year, pig iron production in November fell below 100,000 tons daily, or to 96,373 tons, compared with 101,375 tons in October. From the high point in May, pig iron production has declined 22.8 per cent. Merchant output in November showed a gain of 849 tons daily. Gross production in November was 2,891,191 tons, against 3,142,642 tons in October. The active furnace list fell 14 further to 231 the last day of November, a reduction of 91 from the peak. The year needs only 1,905,800 tons in December to set a new annual production record for the country, and this is assured.

Building activity with 30,000 tons of steel for this purpose contracted for in New York, this week, stands forth. These awards include 14,000 tons for a publication building. Total awards this week are the heaviest since August.

An exceptionally good year in the lake iron ore trade has been ended with total shipments, rail and water, of over 60,000,000 tons. This is the fifth largest in history. The outlook for next year at present is pronounced very promising.

Heavy buying of pig iron continues at Chicago, though apparently the edge is off the buying movement. One seller declares that activity is undiminished. Others are feeling a let-down, though melters still are buying in good quantity. With the excitement of the buying movement over, it becomes evident some large buyers stayed out hoping for lower prices later.

A Chicago melter has placed 5,000 tons of malleable for first quarter, a Chicago user 1,000 tons of foundry for first half, and a Michigan melter 1,000 tons for the first. Numerous sales of malleable and foundry iron in 1,000-ton lots for first quarter are reported. A local foundry

interest sought to place 15,000 tons of foundry with a local steel-maker, but the tonnage was refused.

December iron is going for \$23, while for first quarter the price is \$23.50.

Algoma iron is out of the market until the second quarter.

Charcoal sales are fair, with prices up \$1 to \$29.04, Chicago. Silvery sales were fair during the recent dip of \$1, the previous prices having since been restored.

The southern pig iron market is improving. Quotations have taken a firmer position and inquiries are continuing freely. Bookings have given furnaces a better position and indications point to need for increased production. Most sales have been for prompt delivery. Quotations are firm at \$20 to \$21 for No. 2 foundry, with some interests not seeking business.

The market report of Rogers, Brown & Company says: "The greatest activity in pig iron at present is in the Central West, the buying in the East having subsided due probably to the movement having started earlier.

"A number of the smaller foundries, however, still have their requirements to place for first quarter delivery and there are some of the larger consumers who did not buy, apparently being of the opinion that the recent buying wave, with resultant price advances, was only temporary and that the market would return to its former level.

"The consensus of opinion is that any further changes in price will be upward due to the well filled order books of the furnaces in operation.

"It is not likely that furnaces now out of blast will resume until iron is on a still higher basis, for the present producing cost does not justify."

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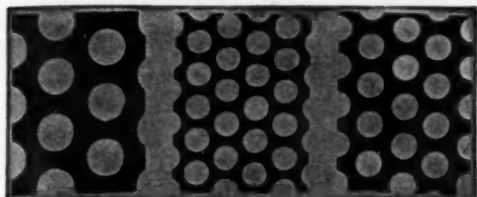
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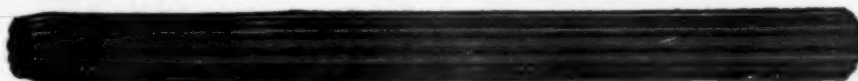
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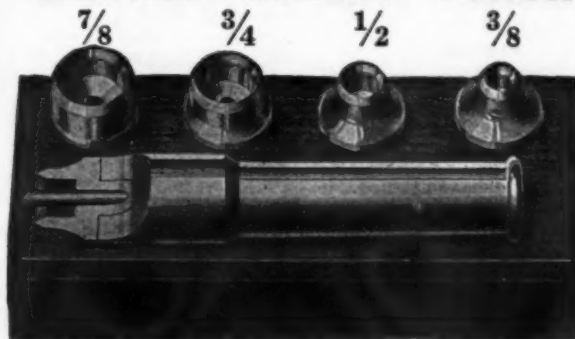


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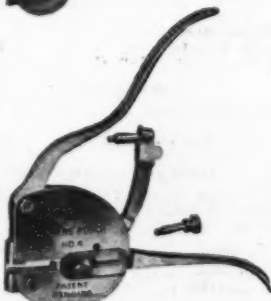
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Extra Punches and Dies for Tool 40c Per Size

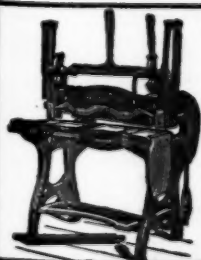
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Try	"
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Barbed	per lb. 21c @ 12c
Butter, Tub	" 16 @ 19c
Fence—	
Polished	per 100 lbs. \$5 45
Galvanized	6 15
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Galvanized	per 100 lbs. \$6 54
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Staples, Hasps, Hooks and	
Staples, and Hooks and	
Staples	50 & 10%
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More Grite	" "
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Crescent	" "
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bag	" "
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No. 11 Stearns pat-	
tern	10 00
No. 15 Smith pat-	
tern	7 00

STOPPERS, FLUE	
Common	per doz. \$1 10
Gem, No. 1	" 1 10
Gem, flat, No. 3	" 1 00

STRETCHERS.	
Carpet.	
Bullard's	per doz. \$3 90
Excelsior	" 5 25
Malleable Iron	" 70
Perfection	" 6 30
King	" 4 50
Wire.	
O. S. Elwood, No. 1	per doz. Nets
O. S. Elwood, No. 2	" "

SWIVELS	
Malleable Iron	per lb. \$0 10
Wrought Steel	per gro. 4 50

TACKS.	
Bill Posters' 6-oz. 25-lb. boxes	
per lb	15c
Upholsterers' 6-oz. 25-lb.	
boxes, per lb	15 1/4c

TAPES, MEASURING.	
Asser' Skin	List & 40%

THERMOMETERS.	
Tin Case	per doz. 80c & \$ 1 25
Wood Backs	" 2 00 & 12 00
Glass	" 12 00

TIES.	
Bale.	
Single Loop, carload	
lots	75 & 7%
Single Loop, less than	
car lots	70 & 15%

TRAPS.	
Mouse and Rat.	
Sure Catch Mouse Traps.....	Per Gross \$ 2 10
Vim Mouse Traps.....	2 10
Short Stop Mouse Traps.....	1 30
Wood Choker Mouse	
Traps, 4 hole.....	10 25

Per Doz.	
Sure Catch Rat Traps.....	\$0 90
Dead Easy Rat Traps.....	1 00
Packed in One Bushel Band Stave	
Baskets.	
List per Bushel	
Sure Catch Mouse Traps	
(360 Traps)	\$ 5 25
Short Stop Mouse Traps	
(360 Traps)	4 50
Sure Catch Rat Traps (54	
Traps)	3 60
Short Stop Rat Traps (54	
Traps)	3 15
Assorted Mouse and Rat Traps.	
List per Bushel.	
Sure Catch (216 Mouse	
Traps and 26 Rat Traps) \$4 90	
Short Stop (216 Mouse	
Traps and 26 Rat Traps) 4 25	

TROWELS.	
Cement.	
Atkins No. 6.....	\$19 50
No. 9.....	25 50

TWINE.	
White Cotton.	
Eureka, 4-ply	per lb. 30c
Jute.	
3-ply and 6-ply Bale Lots 22 1/2c	

VALLEY.	
Milcor	
Galv. formed or roll.....	60%

VENTILATORS.	
Standard	30 to 40%

VISES.	
No. 700 Hand.	
Inches	4 1/2 5 5 1/2
Doz.	\$11 15 13 00 14 35
No. 701. In. 4 5 6	
Doz.	\$11 15 13 00 16 70
No. 1, Genuine Wentworth.	
Noiseless Saw.....per doz.	9 25
No. 3, Genuine Wentworth.	
Noiseless Saw.....per doz.	12 75
No. 500, All Steel Folding	
Saw	per doz. 16 00

WASHERS.	
Over 1/2 in. barrel lots	
per 100 lbs.	\$6 25
Iron and Steel.	
In. 5/16 3/4 1 1/4 1 3/4 2 1/4	
10 1/2c 9 1/4c 7 1/4c 7 1/4c 7 2/5c	

WEATHER STRIPS.	
Metallic Stretched.	
1/2 in., per 100 ft.....	\$1 80
3/4 in., per 100 ft.....	2 20
Wood and Felt.	
1/2 in., per 100 ft.....	\$1 56
3/4 in., per 100 ft.....	1 56

WEIGHTS.	
Hitching	per lb. Nets
Sash—f. o. b. Chicago	
Smaller lots, per ton.....	\$47 50

WHEEL BARROWS.	
Common Wood Tray.....	\$3 75
Steel Tray, Competition.....	4 50
Steel leg, garden.....	6 00

WIRE.	
Plain annealed wire, No. 8	
per 100 lbs.	\$3 70
Galvanized barb wire, per	
100 lbs.	4 10
Wire cloth—Black painted,	
12-mesh, per 100 sq. ft.	2 35
Cattle Wire—galvanized	
catch weight spool, per	
100 lbs.	4 60
Galvanized Hog Wire, 80 rod	
spool, per spool.....	3 98
Galvanized plain wire, No. 9,	
per 100 lbs.	4 15
Stove Pipe, per stone.....	1 10

WOOD FACES.	
50% off list.	

WRENCHES.	
Coes Steel Handle, 6-in.	40-10%
" " " 8-in.	40-10%
" " " 10-in.	40-10%
" " " 12-in.	40-10%
Coes Knife-Handle, 6-in.	40-10%
" " " 8-in.	40-10%
" " " 10-in.	40-10%
" " " 12-in.	40-10%
Coes All Patterns.....	40-10%

WRINGERS.	
No. 790, Guarantee per doz.	\$49 50
No. 770, Bicycle	47 00
No. 670, Domestic	43 50
No. 110, Brighton	39 00
No. 750, Guarantee	51 00
No. 740, Bicycle	45 50
No. 22, Pioneer	35 50
No. 2, Superb	25 50

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